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Resource Constraints for Housing in Metropolitan Cities

Some Suggestions on Publication Policy of Universities

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EDITORIAL - SOME HIGHLIGHTS

I. General Economic Scene

State

Planning Commission

As a result of the final discussions between the Chairman of State Planning Commission and the Deputy Chairman of the Union Planning Commission, the state Plan for 1991-92 was fixed at Rs. 1600 crores, as against Rs. 1450 crores for the current year 1990-91. It was agreed that this outlay will require special efforts at additional resource mobilisation in 1991-92. The priorities under that are employment generation, poverty alleviation and the minimum needs programme including supply of drinking water to villages, eradication of illiteracy and rural development. As will be noted later under the national section, there is some uncertainty about the resources that will be available in 1991-92, which will affect the level of the Plan for that year for all states. During January, the State Planning Commission reviewed Part I schemes under education, and science and technology for 1990-91 and finalised them. It also examined in some depth, the rural roads programme and indicated the means of economising on it in order to live within the allocation of Rs. 45 crores available during the VIII Plan for that programme.

Weather and Prices

January was on the whole cool and dry, except for some rains at the start of the month and at the middle in Coimbatore and Thanjavur districts. The meteorological department reports that during the North East monsoon which tapered off in the middle of December, the state received its normal quota of 45 cms against the normal average of 47 cms. The North central districts experienced deficiency—Salem with—60 per cent deficiency, Dharmapuri with -50 per cent, Tiruchirapalli with -52 per cent, North Arcot Ambedkar with -39 per cent, Pasumpon with -31 per cent, Pudukottai -30 per cent, Tiruvannamalai Sambuvarayar -27 per cent and Than-

ajavur -22 per cent. On the other hand, Kanyakumari had +58 per cent excess, Tirunelveli Kattabomman +24 per cent and Nilgiris +33 per cent-excess rains, as did Madras +225 mm. The effect of this rainfall will be referred to under the state agricultural section. On prices, CSO's monthly abstract of statistics for July 1990 (which is normally about 6 to 7 months behind the month under consideration because of the time taken to collect the data and process it states that the index number of consumer prices for industrial workers in April did not move from its March record at 127 and in May moved by only 2 points to 129 (though it records the food prices moved up by 3 points to 181 cancelled by the 4 point decline in clothing prices at 142), the index number of consumer prices for agricultural labour which as reported in the last issue shot up by 12 points in April rose even higher by 14 points to 745 in May (the puzzling part of the inflation which is also a national phenomena is that at a time of a bumper harvest food prices rising by 16 point to 789 in May) : the consumer price index for urban non manual workers continued to be relatively steady in May being stagnant for Madurai (at the April level), rising by 2 points for Madras, and I point for Coimbatore, Salem and Tiruchirapalli. But the Gulf war which limiting HSD supply restricts the supply of fruits and vegetables resulted in a sharp rise of prices of essential commodities, particularly edible oils, pulses, sugar, potatoes etc by 20 to 25 per cent. This is reported every week from all over the state.

Power

Power in the state in January was normal with the usual ups and downs. The 2 units of Kalpakkam had to be closed and so generation of the thermal plants at Ennore. Tuticorin and Mettur as well as from Neyveli and Ramagundam was stepped up. So too was power generation from the hydel station maintained at 900 MW. The problem here is that the power plants are functioning at the margin of the increasing power demand of the state, so that any shut down as in Kalpakkam throws the system out of gear. There are some bright spots in the state's power scene. Tuticorin in 1990 had a plant load factor of 71.47 per cent. The Ennore plant is to be modernised and a consultant has been employed to improve the thermal efficiency of the system from the very low 30 per cent, power supply will be augmented from a new source-the Narimanam gas station while using 70,000 cubic meters of gas per day will operate 2 five MW units yielding 45.70 million units. This is a start of the diversion of gas to the state's power supply.

At the national level, power supply in January was normal except in Andhra Pradesh where HT users are facing a power cut and Rajasthan which has imposed a 60 per cent power cut on HT users. But the long term power perspectives are bleak. The finances of the sector are in a mess. The State Electricity Boards owe over Rs. 2000 crores, to the NTPC for NHPC and with their accumulated losses to Rs. 2500 crores, the decision made a few months ago to repay these dues from the Union grants to the states has caused such furore on the part of the states, that after paying 25 per cent of the dues, this decision is now reversed. Meanwhile the World Bank has stated that it will not provide loans for power development, if these dues are not cleared. It recently refused to disburse

575 million to NTPC, Farakka III and Vindhyachal transmission unless the SEB dues are collected. The SEBs do not have the money. DVC has stated that it will stop power supply to Bihar and West Bengal unless their dues of Rs. 300 crores are paid. The non payment of dues are resulting in the NTPC, NHPC and DVC recording losses. This scenario also explains the emphasis on throwing open power generation to the private sector, which TN, AP, Karnataka and several states are doing which, as pointed out in the last issue, raises in turn several problems. Also the rapid development of unconventional sources of energy including waver power which is being developed in the Trivandrum coast and the setting up of energy cells in industrial estates should be seen against this background.

Water

Negotiations are still under way with Karnataka for the 15 tmc ft of Cauvery water to save the samba paddy crop in the Thanjavur delta. In exchange Tamil Nadu is being asked to provide Karnataka with electricity. The problem is complicated because of the poor relations between the 2 states, the Tamil Nadu request being set at 15 mcft the for power exchange. It is to be hoped that water - atleast 5 tmcft will flow to the fields by the end of January. On the Telugu Ganga Water project for Madras city (15 tmcft from Krishna) being planned to be available in 1993, there is the problem of the shortage of civil engineers and the lack of HSD in the wake of the Gulf crisis holding up the project. The first should be solved by allocating the needed engineers to this project : the second will involve its being given a priority by the 2 state governments. As noted in the last issue, the drinking water situation in Madras for this year is in hand. The combined storage in the 3 reservoirs-Red Hills, Cholavaram and Poondi is 3857 mcft as at January 1 against the maximum of 5369 mcft on January 1, 1986.

Assembly decisions

The Governor in his address stated that the Rs. 310 crore World Bank funded agricultural project-which strengthens seed production facilities, water shed development over 1.35 lakh acres, forestry over 90,000 acres in the Western Ghats, improved veterinary services for all the state, rural water supply schemes in 4 districts, and 800 kms of rural roads in 4 districts. Another World Bank aided Rs. 350 crores nutrition project is alongside of the nutritious meal scheme and maternal and child health centres inhabitations with 500 population. Over 10323 habitations have been provided with safe drinking water by June 1990 and by 1991 the remaining 5961 habitations are to be coverd. Accelerated slum improvements covering 12,000 tenements, further extension of the loan waiver scheme are planned. The legislation approved supplementary estimates of Rs. 74.94 crores. It also approved 7 bills on general sales tax, entertainment tax, district municipalties, (three bills), panchayats and panchayat councils (2 bills).

Urban development

The finances of the Madras Corporation which are to cater to the needs of 50 lakh people are totally inadequate and its inadequate budget has to be supplemented by ad hoc grants from the

State government. As pointed out in earlier issues, the Madras Corporation is the poorest body compared to Bombay, Delhi and Calcutta corporations. So the Corporation has submitted to the government proposals to increase its income by Rs. 50 crores. Revision of property tax which will raise its yield from Rs. 25 to 30 crores, the tax rates have not been revised for 13 years and the absence of an elected body since 1973 further limits the corporations power. It should also improve its tax collection machinery and procedures which suffer a lot of leakage. The surcharge on sales tax is being increased from 10 to 15 per cent and 80 per cent of the increase is to be paid to the Corporation. It also has been asking for a share in the motor vehicle tax to which it is entitled. All this is still inadequate and the citizens should gird themselves to finance the corporation more adequately, even at 1/3 the rate of the Bombay Corporation, whose annual mean income/expenditure is Rs. 700 crores.

National

Plan

The plan and planning is in some confusion and faces some uncertainties. It was originally planned to conduct the review of the VIII Plan proposals of the Union ministries and state governments and the 1991-92 plan together (referred to in the January issue), but last month it was decided to take up only the 1991-92 Annual Plan because though the financial outlay of the VIII Plan was seemingly established, with the Gulf crisis and various uncertainties seen in the fast rising fiscal deficit, the balance of payments problem, inflation etc. the resource availability for the VIII Plan becomes a question mark. As for the Annual 1991-92 Plan of the states, the Commission completed the review by the third week of January and announced that the outlay for the 5 states amounted to Rs. 27,668.32 crores which was an 18 per cent increase over the current year's Rs. 23,462 crores. But soon after this work was completed, it is reported that the Planning Commission wants a 20 per cent cut in the outlay that has been fixed because next year's resources are quite hazy and uncertain and at the present juncture it feels that such a level of plan outlay may involve heavy deficit financing. It is to be regretted, that this exercise of the resources likely to be available for 1991-92 was not first established before the review of the state plans, as a 20 per cent cut is quite heavy and will involve redrawing the priorities. For a state like Tamil Nadu, it will involve a reduction of Rs. 320 crores which will affect the proposal programmes. In defence, it is true that the Gulf war and its effects on the economy are unfolding on a daily basis, and so there is an element of uncertainty. But it also shows a lack of forecasting and not setting an upper and lower limit for each state plan which could have been done. Now there are 2 consequences to be faced. First, the precise plan outlay for 1991-92 should be finalised now by the end of January, because in February both the Union budget and some state budgets will have to be presented to the legislative bodies. Second, the silence on the eighth plan is somewhat ominous. Does it mean that in spite of government protestations, there will be a plan holiday and that we will have to have to do with a series of Annual Plans. The major thrust are clear : they have to be a) strengthening the infrastructural facilities, b) achieving a faster generation of employment and c)

increasing rural investment and d) alleviating poverty. But there will have to be some slowing, if not abandonment of certain "populist" schemes and some modification of even those announced and launched.

Prices

Inflation on a point to point basis rose by 1.1 point during December, the wholesale price index standing at 184 for the week ended December 29. This means first on a 12 month basis, inflation was 11.72 per cent on December 29 (on December 22 it was 11.92 per cent) and on a 9 month basis, April-December it was 9.3 per cent, the highest in the 80s. Second, the price rise was caused by the rise in prices of essential commodities propelled by the hikes in petroleum products and food articles, caused by the government's fuel surcharge and the rise in procurement prices. The inflation hits the poorer sections with the prices of the commodities consumed by them going up — foodgrains by 10 per cent, edible oils by 28 per cent, tea by 23 per cent, food products by 12 per cent and mineral oils by 31 percent, with a much slower increase in manufactured prices at 9.5 per cent. The inflation has an anti poor start. Third, the inflation rate has acted contrary to the normal cycle. Usually it touches the high point around August/ September and a low point in December. This year the downward movement has not happened, rather it has been a continuously rising curve and if it continues into the next calender year, the economy is in serious trouble. The Minister of Finance has announced that increased money supply has caused inflation, he plans to restrict money supply this year to 15.5 per cent and next year to 14 per cent.

Budget, Stock Exchange and Loans

One related phenomenon is the large fiscal deficit of Rs. 13000 crores at the end of November reported by the government to Parliament, against the previous year's Rs. 13082 crores. The deficit in the budget for 1990-91 when presented was Rs. 7200 crores, after the first 4 months; the budget deficit reported by the previous finance minister was Rs. 8931 crores and now after the second 4 months it stand as Rs. 13000 crores. The reason for this deficit is due to lower tax collection — corporation tax 16.44 per cent of estimates for April-November 1990 compared to 25.93 per cent for that period in 1989, income tax 41.16 per cent against 54.15 per cent, customs 58.10 per cent against 62.6 per cent, and excise 59.14 per cent against 60.27 per cent. On the other hand market borrowing was 70.80 per cent of the budget estimates against 42.4 per cent and net external assistance 27.80 per cent against 24.30 per cent. The second reason for the deficit is expenditures out running the budget estimates and on this he particularly highlighted the under estimates of the farm loan scheme (where against the budget provision of Rs. 1000 crores, Rs. 4000 crores has been spent), the increased burden of fertiliser subsidies, the case of rehabilitation of Indian citizens from Kuwait, the squeeze on non oil imports and the Gulf crisis involving no contribution from the Oil Coordination Committee account. Under these conditions, the government has taken a series of steps to implement the austerity measures referred to in the last issue. These measures are estimated to save Rs. 1650

crores, mainly through the 10 per cent cut in expenditures. Second, the various hikes in taxes referred to in the last issue would bring in an additional revenue of Rs. 1200 crores and to that extent keep down the deficit. Third, various measures are being taken through travel restrictions, cancelling of seminars and conferences, to check the fuel drain. This includes cut in public transport—railways and state transportation. Fourth, Air India, Indian Airlines and Vayudoot are required,to cut their aviation turbine fuel consumption by 25 per cent. Fifth, the Planning Commission wants the power subsidy to be cut, (involving stopping the free supply of power to agriculture and all subsidised supply to domestic consumers). Expenditure in every ministry is being monitored from the beginning of 1990-91 and no excess spending of alcohol. Further, the food subsidy will be reduced by making PDS available only to the poor in rural areas and the slum dwellers in cities. This will save Rs. 1500 crores. Again it is proposed to refer some 40 sick public sector units tor BIFR and if they are ordered closed, there will be a saving of Rs. 2000 crores. On this basis it is expected that the deficit this year will be Rs. 11,000 crores, falling from 8.9 to 8.3 per cent of GDP. The government announced in January 4 loans aggregating Rs. 1500 crores, with a net amount of Rs. 1362.49 crores (Rs. 137.52 crores are for redemption of loans). January has been a month when the stock exchanges have faced some serious disorder. In a bid to stabilise the market, the governing board of the Bombay Stock Exchange has imposed trading restrictions to prevent a precipitious fall in prices. Further over a score of stock broking firms across the country are in financial difficulties as their investor clients have deserted them without clearing their payments. Delhi also introduced several measures to check a further fall in share values. After the outbreak of the Gulf war, except the Madras Stock Exchange, all other exchanges were closed for varying period of 7—10 days. It is only in February that the final effect of the Gulf crisis on the stock exchanges can be measured.

The Economy

The economy shows positive signs in the recent past but also negative signals for the present and immediate future. Looking at 1990-91, it is noticed that despite serious fiscal imbalances and high deficit financing, increasingly adverse balance of payment, rising prices, political instability and the Gulf crisis, the positive factor of a good monsoon resulting in buoyant agricultural production, with foodgrains expected to increase by 5.2 per cent over 1989-90 and agricultural index ising by 3.8 per cent, hydel power exceeding the target, while thermal and nuclear are 4 per cent behind their target : coal is expected to increase by 4.6 per cent ; crude production because of the Assam blockade being 2.4 million tonnes short of the target ; the search by government to transfer some public sector units which are not doing well to the private sector ; the 41 major industrial group continuing their 1989-90 record of profitability ; overall industrial growth which was 11.7 per cent in the first half of the year, 1990-91 expected to be 7.7 per cent for the year ; the trade deficit will be higher than 1988-89's Rs. 14000 crores and balance on current account higher than that year's deficit of Rs. 10,400 crores. On balance, the year is expected to record a 5 per cent growth. As againts

this optimistic projection, the short term trends are not satisfactory—the falling government revenues, the slow down in export growth, the inflationary situation stoked by primary good prices while manufactures prices are fairly stable, the slow down of the railways progress due to shortage of resources, the non development of backward regions, the 8 million tonnes short fall in revenue earning traffic and the slow pace of modernisation and upgrading in the system. There are other symptoms of strains in the economy, such as the Comptroller and Auditor General in the Annual Report pointing to the lack of effective monitoring of RELEGP, JRY and the Indira Awas Yojana resulting in slow down of the programme and some avoidable wastages and leakages and more serious, the lack of an appropriate technique to identify rural landless labour. There are also some short term positive signs such as the small 5 per cent growth in the infrastructure sector from November covering coal (in December +20.4 million tonnes), electricity (+7.8 per cent), crude declined less sharply -0.7) per cent), cement recovering (+1.9 per cent), steel (+8 lakh tonnes). Whether this improvement will continue and increase sharply in the last quarter of 1990-91 remains to be seen. Further, the drive against hoarding and black marketing may be given some teeth at the present time because consumers are taking a hand in identifying hoarders and black marketeers as in the case of edible oils where there are shortages along with the absence of imports (not only to save foreign exchange but even more to give the oil seed growers remunerative prices), is leading both to panic buying and some dehoarding. Two other long term trends should be noted. One is that the RBI 1981-82 survey shows that of the total debt owed by rural households, credit institutions share which was 7.2 per cent in 1951 and 17.3 per cent in 1961 has increased to 61.2 per cent in 1981. Within the increase in rural branch banking this trend of loosening the grip of the money lender from over 92 per cent in 1951 to 38 per cent in 1981 should be further strengthened. It is rightly pointed out that for the future the poor need not only be given more credit aid but should be made more credit worthy. A second issue brought out by a World Bank study of developing countries is that a successful liberalisation policy requires (a rapid dismantling of quantitative restrictions, b) a substantial real dismantling of the currency and c) a stable macro economic environment. This 30 country study on trade reform has its usual (world bank) biases especially on the first two components, but the need for macro economic stability and the reform undertaken having to be "bold one should start with a bang" seems a counter to the slow moving implementation on agreed reform measures. And what is true is that any liberalisation reform measure needs to be part of a broader macro economic stability package-which is a good point of transition to looking at the state of our industry.

Industry

The country's industrial scene presents a variegated picture in terms of its growth rate on which estimates for the year were just referred to. CSO quick estimate on the 1980-81 base for the first seven months, April to October, industrial growth was 10.8 per cent, with manufactures at a high 12.6 per cent, electricity at 7.3 per cent and mining 3.2 per cent. The manu-

facturing sector will not be able to keep up this high growth rate for the balance of this year. On the positive side among the industrial groups doing well are the jute industry which, because of the Gulf crisis and the shooting up of the price of oil; finds its synthetic substitutes being priced out of the market. This together with the environmental plus point of the jute industry compared to the crude industry and its products open up a good future for the industry. The steel industry which as noted earlier is slowly improving will also further expand when its opening to the private sector referred to in the last issue takes effect. If the advice of the Economic Advisory Committees on providing fiscal incentives to increased investment and components expansion and the lowering of the present high tax rates on processed fruits and vegetables is followed by the government, the agro processing industry would receive a boost, and the present ridiculous situation under which canned fruits and vegetables cost more than superior better tasting fresh ones could be ended. Because of the fiscal functioning, the tax element as a ratio of production cost of canned fruits is 105.9 per cent instead being as in other countries less than 30 per cent. The effect on demand; capacity, quality follow from this absurdity. Similarly the electronics groups is poised to expand fast for which its technological and manufacturing base needs upgradation and the indigenisation process in the components sector needs acceleration. In this context the international review of Indian industry by ADB & ESCAP commend the progress and performance in recent years which are attributed to the larger role given to the private sector alongwith more liberal imports. This analysis is open to question as there is no real perceptible increase in the private sector's performance—except the decision to open up some areas — like steel and power to it which have yet to be translated into procedures and decisions and the import liberalisation referred to being both short lived and of little benefit to the majority of consumers. Another industrial group which raises some queries is fertilisers when there are three issues facing the industry and economy. First, the government's decision to cut DAP imports instead of reducing the import of phosphatic acid and ammonia as a means of saving on foreign exchange in affecting some 10 domestic phosphatic units which have been built up over the years. This therefore needs a review by the government. Second, the government's decision to modify the fertiliser allocation norms under the Essential Commodities Act (ECA) is sound because that is the only way in which a true picture of the needed inventory can be arrived at, particularly in surplus years. Instead of fixing a percentage of the inventories and current production to determine the allocation under ECA, the entire production is being allocated and the inventory allocated subsequently. Third and most important the fertiliser subsidy is to be reduced, and as such increases are usually passed on to the consumers by the farmers, fertiliser prices are being increased by 15 per cent to 25 per cent. This will be paid by the large and well to do farmers who use the fertilisers and in any case the farmer is not absorbing it but passing it on to the consumer. This will further augment the current inflationary impact on goodgrains prices — which should be so regulated as not to affect the poor man's foodgrains. Finally the Estimate Committee of Parliament has suggested a redefining of the role of BIFR to deal with growing industrial

sickness, on which it quotes in 1989-90 Economic Survey as reporting 2.06 lakh units being sick, involving Rs. 6,256 4 crores as outstanding. This include 45 heavy engineering units in the private sector and 2 in the government sector. This raises 3 issues. First, BIFR which comes into the picture very late, after the net worth of the unit is exhausted, should be brought in earlier when the first whiff of sickness in a unit is known and that is known only to the financial institutes. What is needed is to ensure that financial institutions promptly inform BIFR which can be authorised to take suo moto action. Second, the establishment of the revival package involves endless hearing, consultation, negotiation, and final approval of the State government. As the case of Standard Motors of Tamil Nadu analysed in the last 2 issues shows, this prolonged process makes the cure and rehabilitation too little and too late. BIFR must be authorised to act on its policy package at an appropriate early date. Third, and as a consequence, there must be provision on the Act for closing down-the exit of terminally sick units. In fact Act (Sick Industrial Companies (special provision Act) seems designed to avert closures through mergers. The Act must provide for sick units to die. There is no alternative to it.

Public Sector Enterprises

In January, government on the one hand limited the foreign exchange expenditures of the public sector units to the approved levels for the current year and directed that should be the ceiling for 1991-92. This brings the public sector in line with restrictions imposed on the private sector. On the other hand their extra budgetary resources which include external commercial borrowings have been increased by 125 per cent as far as the target is concerned. There should be careful scrutiny that this leeway is used only for those projects which earn foreign exchange in the future. The Department of Heavy Industry continues to give the quite unless information that the 33 units under it increased their production in November by 17 per cent, though the fact that this will not help it attain the cumulative target is not brought out. This kind of misleading information should be suppressed. The World Bank recommends that priority lending by public sector banks should be terminated in order to make bank operations profitable. There are other ways like stopping lending to favoured customers, leakages etc. which can improve bank's profits.

National Production Front

Steel

The comparative poor performance of the steel industry in comparison with the Chinese industry which started at the same low level as India has been noted in earlier issues. Now there is a new urgency, as the oil crisis, which is a long term phenomenon also noted in the last issue, will lead to a decline in steel production world wide, with the demand not shrinking. The Indian gap between steel availability and demand, which was analysed in earlier issues (See Vol XX p413) now must be faced head on. For this, the technical health of the SAIL plants, Bokaro, Rourkela, Bhilai and Durgapur must be restored and enhanced. The modernisation of the public sector plants is the more urgent, as the private sector's 1 million steel plants applications are pouring in. By mid January 50 applications to set up 7 million tonnes had been received. Even if 10 of them are

selected, after a very detailed and careful selection process (to avoid a repeat of the 1970s experience of the *mad scramble* and the following crash) a) some Rs. 20,000 crores will be invested, b) of the 27 to 30 million tonnes of steel estimated to be needed at the end of the VIII Plan, these units will contribute 8 to 9 million tonnes, c) the capital market and banks will have to accomodate their demand and d) the ills of the public sector plants-price controls, outdated equipment, excess labour force will not face these new units. Also the case for modernation of SAIL plants receives new urgency. This also means that steel output will by the end of the VIII Plan be doubled. Hence the slow pace at which SAIL plants are increasing their production (3 to 4 per cent in December 1990) also needs to be stepped up SAIL in a memo to government points out that the existing steel pricing and distribution controls are based on steel being regarded as a bulk commodity discriminated against the main steel producers — SAIL and TISCO.

Crude

Crude oil which has become the key factor in the economy presents in January positive and negative features. First on the positive side, available data shows for the first time a decline in the consumption of petroleum products to 1.5 per cent in the period July-November 1990 against 9.4 per cent in July-November 1989. The June curbs on petroleum consumption (See Vol XX p36), the 25 per cent Gulf surcharge have had the effect of maintaining petrol consumption at the same level unlike the 16.5 per cent increase last year, diesel consumption growth falling from last year's 14.4 per cent to 1.6 per cent and kerosene at 4 per cent against last year's 7 per cent. Alternative crude supply has been negotiated net from Iran (2.5 million tonnes) and Malaysia (1 million tonne). The negative elements are several. Crude production for the year is likely to fall by 2.174 million tonnes due to bandhs and agitations in Assam and Nagaland and the 3 days strike by officers, (at a time when the country can least afford it), along with closing down of some wells in Gujarat and Bombay High because of high gas oil ratios. (ONGC on the other hand reports at January end that it has struck gas in 4 structures in Bombay High). Second, the import bill for petroleum products for the year is likely to be Rs. 10,000 crores in place of the expected Rs. 6400 crores. Third, the future is even more daunting. The demand for petroleum products is estimated to increase from 57 million tonnes in 1989-90 to 67 million tonnes in 1994-95 and 101.3 million tonnes in 1999-2000 Indigenous production which met 67 per cent of demand in 1984-85 fell to 57 per cent in 1989-90 and will fall further in VIII and IX Plan. But there are conservation and saving possibilities which should now be put into effect. The Kapoor Committee on energy suggested that Rs. 3000 crores invested in energy will save Rs. 1925 crores annually : a World Bank survey of 8 industries shows that 9 to 14 million tonnes per year can be saved through the investment of Rs 1400-2000 crores. Energy conservation is possible and cheap and there is no escape from it. The International Energy Agency states that its 21 member council has decided to release 2.5 million barrels of crude every day from government stocks to keep crude prices down. This would help crude import and countries like India.

Coal

The coal scene is equally sombre. On the one hand coal production is declining as noted in the last issue; while industry estimates are that by 2004-2005 million tonnes of coal will be needed. More immediately the government has drawn up a 3 point emergency plan for coal to make up for the limited supply of petroleum products — increased supply of coking coal to steel plants (4 5 million tonnes), increased supply of power grade coal to thermal plants (160 million tonnes) and soft coke to domestic consumers. Is there any one of this contradictory scenario of falling production and increasing demand which the present energy scene demands? Two short term actions may be explored. One is to raise the price of coal to cover its cost of production. True there is inefficiency in man hours and overmanning, true there is a coal mafia, but the price must cover cost. Even when the last price increase in 1984 was made, it did not take into account the new wage element. It is true that the raising of the price of coal will send up the cost of power, railways etc. but we are doing this raising the price of petroleum products, and really the power boards must break out of their low price syndrome and charge power rates which cover their costs. A second short term measure is, till we can afford to update our machinery for underground mines, there should be rapid increase for the present in open cast mining which also will be a saving for the coal industry.

Non ferrous

We are short of non ferrous metals and are importing them at a heavy cost. Hence the flury of activity to increase non ferrous production makes sense — NALCO's Rs. 2200 crores plan to expand its capacity by 50 per cent ; Hindustan Zinc to invest Rs. 1000 crores on a number of new schemes like the completion of Rampura Agucha mill, on technology upgradation and on exploration and development of new deposits and modernising its lead plant. All this is needed but the question is whether this is the time, when the resources are unfavourable to formulate the VIII Plan, to make these investments. The possibilities of foreign borrowing are not bright. Last year IOC's attempt to raise a 3 month bridging loan at 50 basis point over LIBOR was unsuccessful. So too was the rejection by a consortium of Japanese Bank of ONGC loan request for $250 million. As both the national and international loan markets have become tighter it may be wise to postpone these investments.

Agricultural Production

On the food grains front, there is adequacy with current buffer stock of rice and wheat and higher procurement expected after the kharif crop. But the supply and prices of edible oils and pulses are at a danger point and how the demand for these can be met is an urgent problem Even with regard to foodgrains, their stock is adequate, but their transport to the areas which need them like Kerala, Tamil Nadu pose a problem if rail services are curtailed due to diesel shortage. This raises the question whether the phasing out of steam engines should be delayed for the present. The government has announced that farm prices will be fixed twice a year—once before sowing and the second after harvest. While the objective of this double pricing may be laudable, that is to give farmers remunerative prices, their

modalities, their effect on consumer prices etc. need further investigation.

Exports and Balance of Payments

The exports and balance of payments situation in January seem to be worsening. For the first 8 months, April November, the trade deficit has increased by Rs. 2600 crores to reach Rs. 7193 crores. These are the DGCI & S figures, the other imports by the defence ministry which do not enter this data will further push up the deficit. The export growth rate during this period is 20.4 per cent and import growth 28.5 per cent. This means that there is no hope of reaching the export target of Rs. 3600 crores for this year and to this the worsening balance of payments due to the Gulf war should be taken into account. In November alone imports shot up by 50.4 par cent (Rs. 4404-crores) largely due to the increase in world oil prices, against which the government took some measures like pruning in OGL list (16 items have been taken off the list) and reducing import approvals by 35.7 per cent in April-October 1990 though imports could not really be cut. The possibility of setting up a super rep to manage the country's day to day trade which would result in exporters being issued import licenses equal to a certain proportion of their export has been suggested The licenses will be freely transferable. The super rep will cover all goods on OGL, the restricted list and the limited permissable list. This is too complex a system to operate so late in the day. On individual items, synthetic textile exports rose by 6 per cent to Rs. 401 88 crores during April-November 1990; cotton textile exports which are Rs 1722.68 crores during January-November 1990 will exceed Rs 1800 crores in the calendar year. Engineering exports have increased to Rs. 2005 crores (39 per cent) during April-December 1990. To encourage exports the value of export licenses have been increased by 15 per cent, permit holders are allowed Rs. 10 lakhs for travelling, and CCS have been granted to handicrafts made from wrought iron, STET. The failure of GATT and the deadlock over MFL may hamper garment exports—especially from the small scale sector which accounts for 75 to 80 per cent of the exports with their low overhead, rapid turnover and high profits.

Aid and loans

The loans recorded in January are seven Japanese loans totalling 129,206 billion yen ($1 billion) for power, afforestation, health technology, small scale industry and housing for low income groups. Japan has also made a grant of $20,391 for improvement of rural medical service in Haryana and HP. As noted earlier, the World Bank made a loan of Rs. 310 for agricultural development in Tamil Nadu. The commonwealth bank of Australia is extending a line of credit of $50 million to SAIL for importing coking coal from Australia. The most serious issue in this area is the report to Parliament by government that out of $18 billion of World Bank aid, $11 billion remain unutilised as on 30 November 1990 and that the World Bank has suspended disbursal of $286 million committed already to 3 major irrigation projects in Maharastra, Haryana, MP. At the present state of an almost empty foreign exchange reserve situation, this delayed use of credit is a criminal negligence due to cost over runs and delays in project. This is inexcusable. To say that counterparts are not available is incredible when we have found Rs. 4000 crores to write off farm loans and were planning a massive employ-

ment guarantee programme. Our priorities are not right. The World Bank has offered $40 million for AP's cyclone emergency reconstruction project. It is also making a loan of $156 million for 2 inland fisheries projects. IDBI has been authorised to raise yen 30 billion from the Japanese market in co-operation with Japanese banks.

International

IMF

India's foreign exchange reserves was Rs. 1877 crores on January 4, which will meet 13 days imports. November's trade deficit was Rs. 1859 and so only a month's cushion was available. On January 19, India after prolonged negotiation concluded an agreement with IMF for 2 loans amounting to $1786 million (Rs. 3275 crores), $1009 million from CCFF to meet the oil import bill and $777 million as a first credit tranch on a stand by arrangement. It is important that the government and country realise that this is just a break which can cover our imports for a month and a half. We need to continue our belt tightening and fiscal austerity. One good feature is that we as a country took all the necessary austerity measure — to control inflation, to increase taxes, to reduce government expenditure and the fiscal deficit, to improve trade balance etc. and so there was at this stage no oil needs for conditionalities which will come up when the second and third stand by arrangements now termed Enhanced Structural Adjustment Facilities (ESAF) credit under EFF come up as it will in the coming financial year.

World Bank

World Bank has laid down 3 conditionalities to grant a $400 million loan as part of the *ICCI's* public issue. The conditionalities are (a) decrease in government control, some privatisation in this term lending bank: (b) three term lending institutions all free to lend at any interest rates they choose to any company or project and (c) the present consortium for lending be ended,—the three being *ICCI*, IDBI and ICICI. They are to stop hedging risks and each bank accept complete exposure for any project it has approved. It is a matter of regret that these conditions have been imposed because the World Bank found that the banks had suppressed the truth about the consortium and its portfolio. The World Bank has accepted their position that government controls are responsible for their poor administration and bad debts. This is false but on this false premise the World Bank has established the 3 conditions which will be self defeating. The World Bank reports, lending $98.8 billion as at the end of 1990 to the third world out of a total lending limit of 150.3 billion. It made a profit of $797 million, borrowed $6.3 billion and loaned $5.6 billion in 1990. The World Bank in a world economic survey states that (a) the gap between developing and industrial countries could widen in the 90s unless many developing countries integrate their economies with the international economy : b) countries restructuring their economies will increase their per capita incomes, some developing countries will remain weak because of high interest rates in industrial countries and — heavy external debts : c) the decline will be due to their heavy reliance on commodity exports when commodities share in world trade and output has declined : (b) the forecast is for world economic growth to be rapid in 90s if there are no serious policy mistakes or shocks.

GATT

There is some talk of a break through in the continuing discussion of the Uruguay round as a result of the EC agreeing to reduce their Agricultural subsidies. Whatever may be the truth of this and whatever may be the final outcome, the marginalisation of the developing countries in this round on every issue of concern to them, liberalisation of the textile trade, capital gains that would follow from an agreement on services was complete and will not be changed by any outcome of the continuing negotiation between the industrial countries. The Uruguay round is central to the concerns of the third world but they will continue to be faced by the protectionist policies of the industrial countries. The doctrine of liberalisation which is being diffused to them seems to have no application to the industrial countries and their trade relation with the developing countries.

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II. Agricultural Development in Tamil Nadu

Paddy and other crops

The samba harvest is now on, the early sown varieties are being harvested. Farmers who went in for late sowing are awaiting Mettur water. Mettur by the third week of January had reached dead storage level of 5 tmcft and so the farmers realise that their crops can be saved either if there is rain or Karnataka responds to the request from Tamil Nadu government and releases Kabini waters. Tamil Nadu has asked for 15 tmcft and various channels are being used to press the request-direct government to government, the Prime Minister's intervention, and that of the President of Congress I. Even if 5tmcft of water is released by Karnataka, the farmers who face a withering crop will be helped, provided it is released from the nearest reservoir to Mettur which is Kabini and released in a day or two Meanwhile there have been some rains in the delta area which has helped the crops. But in both Thanjavur and Tirunelveli districts, the samba and thalady crops are on the point of withering and the farmers are praying that Karnataka will release the waters. The area under samba this year is 1 lakh hectares less at 17.02 lakh hectares than last year. The coming Navarai season will add a further 2 to 2.5 lakh hectares, making a total of 20 lakh hectares. But the yield that the farmers gets from the crops that he has grown over this area will really depend on water being made available to him. A basic question needs to be faced by the farmers in Thanjavur and Tirunelveli districts and the government-and that is if the governments claim before the water resources tribunal to go back to the 1927 agreement on the sharing of the cauvery waters is turned down by the Tribunal, and even if the decision favour Tamil Nadu, Karnataka can go on endless appeals to block its enforcement. Should not the Thanjavur farmer change his cropping pattern and the crops to be grown taking into account the actual water that will be available from the south west and north east monsoon,

with no reliance on Mettur ? This situation when year after year, the crops are at the mercy of the Karnataka government's decision and charity should be ended and in place of the water demanding paddy, where there were no filter points, more reliance on dry crops and short duration paddy and coconut plantation which can be grown with rain water should be his approach. In other words, the time has come for the Thanjavur and Tiruchi farmer to be trained to take account of the fact that he no longer can rely on Mettur water. Over the rest of Tamil Nadu, the farmer in 10 districts are doing well with their reservoirs, tanks and wells having adequate water, while farmers in 9 districts which have had scanty rains — referred to earlier had to reduce the area under paddy. The worst hit were the farmers in Salem and Coimbatore districts who have been able to bring only half the normal area under paddy cultivation. This situation has also raleased fertilisers from Salem, Periyar and Coimbatore districts to Madurai and other southern districts for use by their farmers. One disturbing signal is that when there is failure of rains in rainfed areas, even a dry crop like tapioca is affected. In Salem district which has experienced scanty rains, while farmers have received their normal price for the tapioca that they have grown, the manufacturers find a serious decline in the starch recovery. Here the farmers need to be helped to grow varieties which are more resistent to dry weather.

Research results

Of the 32 research reports recorded in January, attention is drawn to 6 which have immediate interest to the farmer and which can be transferred to the farm or dairy. Two reports from Bhubaneswar's UAT and Kerala's rice research station on means of controlling serious spreading rice pests needs to be passed on to the farmers. One is to eliminate rice thrips which are increasing in paddy nurseries and directly sown paddy through changing the sowing season and flooding the field to kill the thrips and the other is the means of avoiding iron toxity in paddy plants caused by overdose of iron beyond 300 ppm. Another research result from TNAU which Nilgiris farmers can use immediately is the problem of the potato tubes moth which destroys 80 per cent of the potato crop but which can be eliminated by use of *pheromera septrapo* which have been just developed on the basis of their import from Peru and multiplied and adopted to the Nilgiris. A third research report from ARS Bhavanisagar and TNAU Coimbatore can be transferred to the cotton farmer in coimbatore district to develop inter-cropping of green gram with his cotton, which doubles the return on each rupee invested in cotton. Fourth, two reports on weed management and control from AICARP, Hyderabad and TNAU, Madras are also of immediate interest to farmers particularly in the dry farm regions where they face millet losses from weeds ranging from 10-27 per cent and where the various control steps for a) bajra, b) ragi, c) cow peas and d) minor millets are setforth, concentrating on inter-culture combined with manual weeding Fifth and sixth, the results of the TN veterinary and animal science research on means of diagnosing and curing quail disease in poultry that our poultry farmers are facing and the demonstration of the Namakkal Institute on dry cow management to help foetus development and care and the Srikakulam prescription on combating and curing skin inflamation, called dermatitis in animals, can and

should be made available to our dairy farmers.

Horticulture Estates and Dairy Development

Earlier reference was made to importance of processed fruits and the leeway to be made up by the country in this fast growing farming area. Infact the state's vast horticultural potential has not even begun to be tapped, in-part because of the absence for a domestic demand for horticultural products. The average meal at any time, lunch, dinner or breakfast, in the state does not include any fruit except the banana. There is also a vast foreign market for horticultural products which can increase the country's foreign exchange earnings. In light of all this, the proposal to establish small holders Industrial Estates during the current plan should be put into effect immediately and expanded over the plan period. The estates should function in an integrated manner, dealing with production, processing and marketing of all fruits and horticultural products. Under Operation Flood III, dairies are being set up in Salem, Tiruchi, South Arcot, Dharmapuri, Madurai, North Arcot and Periyar districts and in south Madras for a 4 lakh litre capacity dairy and the expansion of Ambattur dairy from 3 lakh litres to 4 lakh litres. Not only is there a large allocation of Rs. 52.79 crores for these 8 dairies, more important they provide the infrastructure for the planned growth of animal husbandry and for processing of the milk delivered daily by farmers to the dairies, which have so far not been accepted because of lack of processing facilities This also is part of the income generating programme for the rural under employed.

Plantation crops

The plantation crops reviewed in the last issue continue to present certain problems which are related to the difficult year, 1991, ahead. The various scientific projection, predictions and extrapolations have an added element of uncertainty brought on by the Gulf conflict, whose duration, it is difficult to hazard at this point. Starting this brief review with *tea*, the perspective for production this year 1991 are bright at 735 million kg (550-570 million kgs from the North and 175 million kg from the South) compared to 715 million kgs in 1990 (532 million kg from the North and 170 million kg from the South). Second, the bank credit for tea for 1991 has been fixed at Rs. 350 crores compared to Rs. 222 crores in 1990, the reasons for this rather large jump being increased cost of inputs that the tea plantations face. Third, on exports 1990 saw a decline to 195 million kg in volume terms being the lowest in the last 5 years but earned Rs. 1000 crores for the first time due to the average unit cost rising to Rs. 50 pe, kg. For 1991 exports could go back to 200 to 210 million kg (the level or the late 80s) with corresponding rise in earned income. In this connection, there is still a debate on whether India should import tea for reexporting it, which makes no sense and could hurt the domestic industry. Finally on pricesf while there is general inflation in the country, it is hoped that the domestic pice of tea will not rise further, which assumes that the cost inputs will not rise; this is already being falsified by the rise in the price of fertilisers. Turning next to *coffee* the 1990-91 crop is placed at 175,000 tonnes compared to 117,800 tonnes received in the pool in 1989-90. On exports, in 1990-91 it woufd be l lakh tonnes

against 1.32 lakh tonnes in 1989-90 when the carryover stock of 44,500 tonnes made a total of 162,000 tonnes. Exports earnings in 1990-91 will be Rs. 280 crores compared to Rs. 360 crores in 1989-90, the fall being due to decrease in value of export. On prices; domestic prices will be at about the export prices, with consumption stagnant at 60,000 tonnes but with new coffee brands-instant, cauvery entering the market in a big way. Finally the Planters Associations are continuing their campaign against the system of pooling by the Coffee Board and want to market their produce themselves through co-operatives or in the open market. The Coffee Board has put out a stout defence of its procedures, of paying the growers a fair price, of earning 7 REP licences, of a streamlined adminstration and regular audit of stocks and finances. There is a need to improve the return on coffee to the growers but this cannot be done at the cost of consumers by increasing the price. MRP is being increased from time to time but this is too little to make any difference to the grower's return. The only real way to increase their return is to lower the cost of production of the crop which will make coffee growing viable. Given the stagnant level of domestic consumption and uncertain export market, this may involve shifting from the coffee to other crops. At bottom the Planters Association complaint arises from their perception of the inadequate return that they receive, on the investment of their time and money. With regard to rubber, on the production side in 1990-91 the estimate is 335,000 tonnes, against 297,300 in 1989-90 and a forecast of 360,000 in 1991-92. Consumption has been placed in 1990-91 at 370,000 calling for an import of 35,000 tonnes. A second issue is the price, which growers wanted at Rs. 30,000 a tonne, and the All India Rubber Industries Association (AIRIA) wanted at 19,000 a tonne. The government fixed the price at Rs. 21,450. This raises once more the question of the rubber buffer introduced in 1986 in order to release rubber when price went above the official level and procuring it when the price fell below it. Due to the interference of growers and politicians, the scheme was abandoned in 1988 without giving it a fair trial. Now the need to revive the buffer stock is urgent. And this is particularly so, as with the Gulf war and the rise in the price of crude and its products, the cost of synthetic rubber is rising fast. This means that rubber prices-both for natural and synthetic rubber-will be rising. In this situation apart from reviving the buffer, there is need for the AIRIA to take a hand in developing rubber plantations as rubber users in the US, UK and Germany do. Second, for producing styrane butadiene rubber, besides the crude oil feed stock industrial alcohol should be used. As crude oil prices are rising and butadiene produced with it is becoming scarce, industrial alcohol should be used. Here India is on strong grounds. As the largest producer of sugarcane, we have a large supply of industrial alcohol which should be increasingly used for production of butadiene. The status of *cardamom* is the same as that set forth in the last issue. In 1990-91, 4050 tonnes is estimated as output and the same production is forecast for 1990-92. Of this 4000 tonnes are consumed within the country. In 1990-91 250 tonnes are expected to be exported earning Rs. 7.5 crores, compared to 171 tonnes earning Rs. 319 crores in 1989-90. In view of the high cost of production and the Gautemala competition, the major part of the production will continue to be consumed internally. *Pepper* in 1991

is estimated at 52,000 tonnes against 65,000 tonnes in 1990. Exports are expected at 38,000 tonnes but it will fetch a lower return because of the sharp fall in international prices. The plantation industry thus faces 1991 with its many problems, whose effects will depend on weather and official policy or lack of policy.

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III. Industrial Development in Tamil Nadu

The trend of industrialisation in the state in January carried many more plus points rather than minus points. To start with the government set up an *industrial clearance committee* for the speedy clearance of various project proposals. The cell headed by the Director of Industries and Commerce will coordinate, the actions of various departments like the factory inspectorates, public health, MMDA, TNEB, Madras Corporation and Pollution Board to help small entrepreneurs to get their projects cleared expeditiously. It also has monitoring responsibilites and meets once a month to take stock of the results of the committee's decisions. Second, the *chapter on Industrial Development* in the states 1990-91 Plan referred to at the start provides a modest Rs. 104.19 crores against Rs. 92.94 crores in the current year and lays emphasis on the government guiding and stimulating industry and not operating by itself. Third, *Best and Crompton* is now moving into the large industrial sector, its growth plan provides for modernisation and consolidation of existing units and develops as thrust areas foundries, hydraulics and environmental engineering which will move the comparative turnover five fold from the current Rs. 195 crores to Rs. 1000 crores by 1995-96. Fourth, *Madras Refineries* has drawn up a plan for setting up a Rs. 30 lakh pilot plant to produce compressed natural gas for the state's public transport system at the rate of 1200 cubic metres a day and has requested ONGC to release the necessary gas from Cauvery. It has also drawn up a plan to invest Rs. 8 crores during the VIII Plan to set up a compressed gas plant to cater to 7000 cusecs a day. The project to be completed by 1994-95 will revolutionise the state's transport system. Fifth, *Manali Petro Chemical*, having successfully launched the mother project for the manufacture of propylene oxide/glucose is now diversifying with an investment of Rs. 400 crores to manufacture Methanedi ISO' Cyanate and tolyalene di so cyanate which will have backward linkage with the mother unit. It will save the country Rs. 35 crores a year in foreign exchange. Sixth, *Madras Fertilisers* have moved the first stage in the approval of the Public Investment Board for its Rs. 312.70 crores restructuring project which will increase its output of ammonia from 750 tonnes a day to 1050 tonnes and urea from 885 to 1400 tonnes, while also lowering its energy consumption. Seventh, *Tamil Nadu Sponge* is setting up the first ever lignite based sponge iron plant in the country using Neyveli Lignite which is close by and limestone from the surrounding area and high quality ore from Hospet, it will use SL/RN rotary

kiln direct reduction technology to produce sponge iron lumps and briquette. It will go into commercial production in April/June of this year. Eighth, *Coimbatore exports of cotton yarn, engineering goods and knit wear* from nearby Tiruppur now valued at Rs. 700 creres will touch Rs. 2000 crores by the end of the VIII Plan, making Coimbatore a major exporting centre. Ninth, *ELCOT* is setting up a plant to produce 7000 sq metres of integrated membrane switch gear at a cost of Rs. 6 crores. It will be the first membrane manufacturing unit in the country, the existing units being only assembly units. It is to go on stream at the end of this year. Tenth, *the CK. Birla Group* is investing Rs. 200 crores for a ball bearing units at Hosur supplementing its 2 units on Hindustan Motors and Hindustan Power Products at Hosur. Eleventh, *Nova Electro Magnetics* is setting up a 100 per cent export oriented unit at MEPZ to manufacture 18 million video tapes and cassettes—all for export. It involves an investment of Rs. 40.94 crores for which the state subsidy of Rs. 35 laks is available (its promoters are investing Rs. 7.9 crores, term loans are Rs. 26 32 crores, and Rs. 6.37 crores will be through a public issue). Twelfth, *SITRA in association with the Apparel Production Council* has established a centre at Tiruppur at a cost of Rs. 13 lakhs to train specialists and technicians in knit wear and to provide library facilities there. This will further develop Tiruppur as a major knit wear exporting centre, earning now Rs. 500 crores a year, as noted earlier. Thirteenth, *SIPCOT's* 54 percent increase of term loans in 1989-90 are beginning to show positive results in the functioning of the assisted industries, though a minus point is the fact that only 3 out of its 7 industrial complexes — Hosur, Ranipet and Gumidipoondi are successful ventures, as revealed by its assessment. Fourteenth, the *Salem Steel Plants* second expansion with its second Sendzimir mill is starting in February, 6 months before the scheduled date. Finally, *CLRI* reports that it has asked union approval for creating an updated design facility for leather garments and footwear in order to meet the fast changing fashions in the leather field. It is also setting up facilities for developing new biological and chemical methods to check pollution problem created by effluents. This is an impressive array of industrial activities, which in a sense was crowded by the 10 Industrial Trade Fair, — INTEC— 91, in Coimbatore which hauled in big business, attracting 30,000 business visitors and generating orders for Rs. 50 crores.

January also saw some negative factors in the industrial scene in the state. First, the procedures for the rescue of the two important units — *Standard Motors and B & C Mills* are being prolonged endlessly with no end in sight. For Standard Motors the search for a promoter continues and is complicated by outside interference in the work of BIFR and Banks. In the case of B & C Mills. too, the search for a promoter continues and the agreement on the division to relocate its processing unit is holding up the rescue of this prestigious unit. Second, *KCP Ltd*, being closed its shutters since October 1990, has resulted in a production loss of Rs. 2 crores and R. 12 lakhs in wages so far. Third, *Neyveli Lignite Corporation* which has been in the forefront of public sector enterprises is now facing difficulties, a) without a chairman since September, b) has had to reduce its bond issue by over 50 per cent because the corresponding projects have not made a start, c) its production programme is below target

in 4 of its 6 producing units between April-December 1990 (the Mine II, its thermal station, the fertiliser plant and the briquetting plant), d) the expansion of the second stage of thermal plant to II has suffered a set back as 210 MW fourth unit has been delayed beyond its scheduled date in November 1990 and there are doubts whether it can attain its revised March 1991 date. This sad record is traced back to March 1989 when there was a gulf dividing the chief executive and the rest of the management. Further the effect of the hike of the excise on manmade fibres by union government referred to in the last issue has been on the unorganised sector of the textile industry *power loom and handlooms* particulary in Kirmagin district where they are concentrated. It has pushed up their production cost at a time when the market for their product has slumped, making their survival difficult. Fourth *leather*, which has been a major strong point of the state faces three negative problems. One is the raw meterial shortage especially against the target for the VIII Plan it has set itself. Second is the financing of its modernisation programme for which it has requested $400 million over a year, which with the increased cost of machinery, must now can be increased. Third. there is the spreading world recession which will result in shrinking its exports. Fifth, the *Chemical industries* in the state are facing a serious problem as the important input, industrial alcohol, is becoming increasingly scarce because of its diversion to the liquor trade, for potable purposes. Finally as part of the capital *going out of the state* referred to in an earlier issue, Karnataka has been able to attract investment from 4 sugar companies in the state-Dalmia, EID-Parry. Sakthi Sugars and Penni Sugars-involving a capital investment of over Rs. 100 crores. Except this last factor, the other negative element are mendable by appropriare action by the state, Even so the positive elements are overwhelming in January in the industrial profile.

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IV Education, Science and Health

Educational reforms

The placing of the Ramamurthy Committee in Parliament has led to wide ranging debate on its recommendations. The Committee, it was noted, has recommended that the Government examine the scope of making universal elementary education (UEE) a fundamental right and for giving educational backward minorities a fair deal. It recommended that women teaching in primary, middle and high schools should be atleast 50 per cent. Noting that 48.6 per cent of habitations (20 per cent of the rural population) do not have primary schools, it finds this one for the reason for lack of access and retention of girls in primary education. It wants that the constitutional directives for UEE to be enlarged to include early childhood care and education. It wants a time frame to switch over to regional languages as medium of

instruction and strict implementation of the 3 languages formula. It recommends a commission to suggest examination reform on an orderly basis, and the discontinuance of the present separate streams at +2 to be replaced by an integrated course of vocationalisation. It suggests that academics be involved in the decision making process of central and state universities. It states that it is in basic agreement with the National Policy on Education which puts to rest the political demand for a complete revamping of the education system. On the future of the Navodaya schools it suggests maintaining status quo and not increasing the present 261 schools, or transferring them to the states leaving them to decide on their future, or restructuring the scheme to make it "a programme of broad based talent nurturing and pace setting". It favours an educational complex — an umbrella organisation at the district level to coordinate educational activity in the district. The complexes will cover not only the neighbourhood schools of the Kothari Commission but also universities and colleges in the district. It has recommended introducing non formal elements — in syllabus, teaching techniques, training, entrance, and exit in schools. The governments reaction to the report is not known. The Minister sounds ambivalent on it. CBSE schools in Madras are setting up a bank of talented teachers to help students to achieve better results in the ensuing public exams. While the setting up of such a pool is good both for teachers and students, its being linked to examination system is a retrograde step. It should promote learning and not examination passing. On the basis of the success of the Rs. 5 crore scheme for ecology, education in 1500 schools, it is proposed by a governmental group that Rs. 60 crores be allocated to environmental orientation in school education. The aim of making education programme of the school to be in harmony with environmental situation and concerns can be achieved with existing resources — human and material, and does not need such a large allocation. The high power committee appointed by the government under Mr. Karthikeyan's chairmanship to examine the poor performance of Tamil Nadu candidates in IAS examinations has recommended that syllabus for university courses in the state should be revised periodically to keep pace with the growth of information and knowledge while universities need to keep their learning systems and learning techniques updated, the aim should not be success in the IAS examination. The latter depends on several quite non educational factors such as the setting up tutorial institutions, the publication of bazaar notes and the prpoer grounding at the school level UGC has notified universities that under its revised scheme of unassigned grants it will provide finance for publication of learned research works as a means of bringing out high quality publications.

Adult Literacy

A round up of literacy efforts in 1990-the International Literacy Year-finds a good record-with literacy mobilisation efforts being intensified through BGVJ which covered 332 districts, 31,000 villages, and enrolling I million volunteers for literacy work. Ernakulam being declared a fully literate district followed by Kerala's decision to make the state 100 per cent literate, with similar efforts by Gujarat, Goa and Pondicherry and regions of Karnataka, West Bengal, MP, UP, AP, Maharastra and Bihar (25 districts covering 25 million illiterates) ; the improved literacy pedagogy introduced centres around 3 primers and a person is declared literate

when he insisted on completing the 3 primers (this programme is called the Improved Pace and Content of Literacy Technique (IPCC) ; radio learning package through AIR involving 4000 adult education centres and II lakh adult volunteers, which will be supplemented by printed education material ; and 625 voluntary agencies which were running 45000 centres in almost every state.

Science

The Annual Science Congress in early January at Indore on "coping with natural disasters-an integrated approach" was opened by the Prime Minister who stressed the reliance of the country on science and scientists. The central problem of why with such a large body of scientists — supposedly the largest after USSR and US — science has made no dent on the country's major problems of poverty, unemployment, illiteracy and illness was not really answered. What was good at the congress was the time devoted to "higher education in science and technology", where a consensus emerged that higher education has been subsidised far too much, to the neglect of primary education-which may well be one of the clues to the problem set forth earlier, of the large body of scientists making no impact on the economy and its major problems One immediate corollary is for fees to be paid by students in higher education who come from well to do families and for private business to do more for education-particularly technical and science and technology education. The state is to commence use of mobile environmental laboratories to help detect and analyse industrial pollution even in remote areas. The TN Pollution Control Board has commissioned 6 mobile labs with 20 instruments each to work from Manali, Cuddalore, Tiruchi, Tuticorin, Coimbatore and Hosur A national research centre on bananas is being set up at the Agricultural College, Kumular, Dharmapuri district which will be important for the banana industry.

Health

The Comptroller and Auditor General in his last report to Parliament finds grave deficiencies in the administration of the Integrated Child Development Services (ICDS). In the 1984-85 period projects have not been properly located, monitored and equipped. beneficiaries not identified, sub standard food is provided to them, health and medicare services are below standard, records have not been properly kept, financial irregularities have taken place and international assistance worth crores of rupees has not been used. This is a serious indictment and rather than increase funds for the scheme every year and in every plan, its organisation, administration and financial procedures should be reorganised and brought into line with its objectives. The Women Doctors Association reports that in Tamil Nadu the incidence of unwed and teenage motherhood has increased sharply, resulting in an alarming increase in illegal abortions. This should be openly discussed, the facts should be publicised, the family life which gives rise to this should be carefully examined and reordered and the medical termination of pregnancy act and facilities made widely known. World Leprosy Day, saw the launching of a massive 3 anti leprosy vaccines in Chingleput district among a population of 3 lakhs in 150 villages, the result being compared with 3 lakh people who will be given saline or place too.

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V. Employment and Labour Relations

The government informed Parliament that 33.25 million job seekers are on the employment exchanges at the end of the VII Plan — 30 March 1990. The government also reports that there was a substantial decline in the number of mandays lost through strikes and lock outs from 14.59 million mandays in the first 8 months of 1989 to 8.22 million mandays in the first 8 months of 1990. Strikes and lock outs have been mostly limited to West Bengal, AP, Tamil Nadu and Maharastra who account for 70 per cent of the total mandays lost — with lock outs recording 58 per cent of the mandays lost. The government states that it is working on an amendment to the Minimum Wages Act to link the wages increases to consumer price index and adjusted periodically as recommended by the conference of labour ministers. Also a union law for agricultural workers and a welfare fund for them is proposed. ILO in a study of state and union intervention on rural labour in Kerala states that the wage rates for agricultural labourers and workers in other rural occupations are one of the highest in the country, due to organisation strength of the rural workforce. State intervention on organisation of workers, land reforms and effective PDS have also raised the reserve prices of labour. State has directly intervened in setting minimum wages and assisted wage bargaining through industrial relations committees. While commending the Kerala experiments, it warns against declining employment opportunities in rural areas. The study points to the complementary relations of employment generation energy and the creation of conditions for the organisation of rural workers. However in male employment opportunities have been declining between 1964-65 and 1983-84 by 26 per cent in terms of per capita employment for agricultural labourers, whereas for other rural labourers the decline is only 10 per cent.

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VI. Other Items

ACU

The Association of Commonwealth Universities held its quadrennial meeting and conference in New Delhi in January 1991, with the Association of Indian Universities acting as the host. Some 50 Vice Chancellors from the Commonwealth Universities and 50 Indian University Vice Chancellors attended the conference. The theme of the conference was—The Challenge facing the university can the new policy meet them ? The first day and a half of the 4 day conference was devoted to an analysis of Indian Universities under four heads — challenges, equity, efficiency and relevance. The discussion was very comprehensive but finally concentrated on the question of equity vrs efficiency as not only an Indian but a world wide problem. The conference was well organised by the host — the secretariat of the Association of Indian Universities.

IIC

At the India International Centre in January the Economic Affairs Group organised two events. First was the monthly panel discussion which this year is to concentrate on issues of national development. And so the January panel took up the issue of the objective of self reliance and poverty alleviation. In the presentation and discussion there were two sharply divergent views presented as a means of alleviating the major Indian problem of poverty. One was to develop the economy on the basis of an autonomous self sufficient unit and the other was to develop the economy as open ended and market oriented. The second event was the seminar the next day on the Ninth Finance Commission at which the Chairman of the Commission and the finance member made the presentation and Mr. Guhan presented the critique of the commissions recommendations. There was commendation of the good technical work of the commission and its primary methodology on quantifying the normative approach. The limited percentage of total resources made available to the states who carry the development responsibility was critically commented on.

SPC

As noted earlier, there were two meetings of the State Planning Commission in January. One was devoted to a review of the states ongoing education programme, where the possibility of rationalising the scholarships to the backward class students was agreed upon. It was also noted that the report of the committee to meet the problem of the poor performance of Tamil Nadu candidates at All India competitive exams referred to earlier, should be taken into account in the reorganised functioning of the universities.

SRC and TNBCE

The bimonthly meeting of the Governing Council of the State Resource Centre was held in mid January at which the rules and procedures to be used for the staff of the council, as recommended by the Standing Finance Committee were approved. Also the council noted with appreciation the report of the many activities of the adult education cadres and the work of the Director and staff during the 2 months since the last meeting of the council. The executive committee of the Tamil Nadu Board of Continuing Education reviewed the financial position of the Board and decided on the procedures for the collection of annual subscriptions It also noted the progress on clearing the land and he approval of the MMDA for the permanent building of TNBCE & SRC. The state government reviewed with the director the matching contributions that it would make as a counterpart to the Rs. 5 lakhs made by the union government. It decided to review the projects funded under the Madras District Literacy Committee at its next session.

February Development Seminar

The paper for the February seminar, Resource Constraints for Housing in Metropolitan Cities by V. Suresh together with a summary of the discussion at the seminar appears as the first article.

Second Article

A note on the Publication Policy of Universities appears as the second article.

Publication Abstracts

A set of abstracts of the Publicatios by the staff of the Institute appears in this section.

M I D S News

Dr. A. Vaidyanathan participated in a meeting of an Expert Group of the N.S.S. to review Context and Design of the 1991-92 All India Landholdings, Debt and Investment Survey at New Delhi on February 27 and 28, 1991.

He also participated in a Workshop on Tank Irrigation in Tamilnadu at Trichy organised by the Bharathidasan University and the Institute of Water Management Studies in Trichy.

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Dr. P. Radhakrishnan participated in a three-day seminar on Ambedkar and Modern India at the Political Science Department of Mysore University from February 15 to 17, and presented a paper on "Ambedkar and Minorities."

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Dr. S. Neelakantan delivered Inaugural Address of the UGC sponsored National Seminar on "Environmental Impact Assessment — Indian Experience" on February 21, 1991 at Geography Department of University of Madras, Madras.

He presented a paper on "Agricultural Policy Through the Plans — Changing Directions" at the Seminar on "Approach to Planning in India" held at the Economics Department of Madurai Kamaraj, University, Madurai on February 25, 1991.

On March 2, 1991, Dr. S. Neelakantan attended the Governing Body Meeting of the Govt. Arts College, Coimbatore to review the autonomous status of the College with the Visiting Committee.

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Resource Constraints for Housing in Metropolitan Cities

by

V. SURESH

Executive Director (South Zone), HUDCO, Madras

1. Introduction

1.1 India is likely to enter the 21st century with an urban population of 34-35 crores. It is also estimated that the number of cities with a population of more than one million each will go up from 12 in 1981 to around 40. Hitherto urban India has been dealt with as a residual issue, an adjunct to rural India. Urban India has become a massive and perhaps frightening reality of the first magnitude. The cities can no longer take care of themselves. They need the full and undivided attention of our planners and administrators.

1.2 The housing scene in India is rather alarming with a backlog of 7 million houses in the urban and 16.3 million houses in the rural areas. Added to this, is the increase in the number of households which is expected to be 63.80 millions by the year 2001. By the year 2001, the shortage will be of the order of 15.5 million houses in the urban areas and 25.5 million houses in the rural areas. Thus, one of the thorniest problems of the rapidly growing urban areas in India, is shelter. Housing has to be given adequate sectoral priority. Although attempts have been made by the public and private sector during the last decade to provide increased thrust to shelter, housing shortage continues to be enormous.

1.3 The stark reality of the urban housing scene in India is that more than 2 lakh urban households are without any shelter and as many as 45% are living in just single room houses with nearly 5 persons in a room in a state of extreme over crowding. Adding to their agony is the absence or inadequacy of the basic services.

.14 In the metropolitan context the situation is more aggravated with the existence of a large component of squatter settlements or 'cheris' or 'gudisalus', 'zoparpattis', 'jhuggi jhompris' etc. The extent of population covered by squatter settlements range from 20 to 42 percent in various metropolitan cities and towns. These settlements which are predominantly belonging to the informal sector contribute in a very major way in the economic development of the cities. At the same time, they do not have a place in the human settlement planning and development strategy. They start finding their own solutions. As a result of this apathy, the nature of settlements create enormous problems through lack of sanitation, hygiene, security and even lead to social tension.

Robert McNamara, Ex. World Bank Chief had said that..." If cities do not deal with problems of these settlements in a constructive way, the informal sector will start dealing with cities in a destructive way ...". In short, what it would mean is that if the cities do not take care of the needs of slums, slums will take over of the cities. The writing is on the wall and we have already seen the extent to which slums have already over grown, from public and private open spaces and lands, canal banks, sides of railway lines and people have now taken over pavements and footpaths. The problem is no more with slum dwellers, but with pavement dwellers. In the city of Madras alone, we have on date; over 18228 families with a population of 1.22 lakhs occupying over 135 road margins. The accretion of the slum families of the cities is of the order of 5,500 each year. The human settlement strategies in metropolitan cities, be it Delhi, Madras, Calcutta, Bombay or even second — tier cities of Bangalore, Hyderabad, Ahmedabad or Kanpur, show that all the housing colonies have taken care of the needs of acute formal sector. Approach to human settlements of the formal sector has been one of fire-fighting approach of trying to solve the problem after generation of the housing crisis and degradation of the settlements in which they live in. Therefore, this is the biggest challenge that we are facing in metropolitan cities in respect of housing. The approaches that the Central, State and city governments would take towards the crying need is being watched with great concern and interest.

1.4 The policy statements in the successive plan documents have continued to emphasize the importance of the housing sector but in reality, investments in housing as a percentage of total investment has declined. As may be seen from the *Table 1* within the total investment the share of the private sector has been dominant, even though private informal investments are not included.

1.5 Another important dimension that has got to be kept in view is the rate at which metropolitan cities range from 60 to 75 per cent with an annual growth of 6 to 7.5 per cent in population. Population of Madras which is now 4.5 million in 1991 is expected to reach 9 million by 2011. Bangalore has already registered decadal growth of 76 per cent in 2 successive decades of 71-81 and 81-91.

TABLE I

Plan period	Total investment in the economy Pub. (Rs. in crores)	Pvt.	Total	Investment in housing Pub. (Rs. in crores)	Pvt.	Total	% age of Hsg. Inv. to total Inv. in economy
1	2	3	4	5	6	7	8
1st	1560	1800	3360	250	900	1150	34
2ns	3650	3100	6750	300	1000	1300	10
3rd	6100	4300	10400	425	1125	1550	15
4th	13655	6980	22635	625	2175	2800	12
5th	31400	16161	47561	1044	3636	4680	10
6th	97500	747101	72210	1491	11500	12991	7.5
7th	168148	180000	349148	2458	29000	31458	9
8th				7750	69746 (proposed)	77496	

Source : Draft Housing Policy, Government of India, Ministry of Urban Development, May 1990

This would mean that the city authorities would have to set up an additional Madras or additional Bangalore in 2 to 3 decades, over the existing cities built over the last 2 or 3 centuries. This calls for a major re-orientation in our approaches in application of limited resources, to take care of the gigantic needs of housing and city growth in metropolitan cities.

2. Resources

Following are the resource requirements for housing :

a) land

b) access to services

c) finance

d) building materials and technologies

e) human resource of various levels (professional, supervisory and artisans)

f) delivery system

2.2 Land

One of the most critical resource needs to take care of the requirements of housing in metropolitan cities is access to serviceable land. While Bombay and Calcutta have very clearly demonstrated its inability to identify new pockets of residential land and have gone in for satellite town developments through New Bombay, Calcutta through Dhankuni, Kalyani and Madras has initiated satellite towns through Maraimalai Nagar and Manali, the stark reality is that the pace at which serviceable land is being made available for growing demand is very small and of negligible proportion. Therefore, the time has come for pragmatic, realistic and innovative policies for intense and optimum utilization of urban land for residential purpose in metropolitan cities. The following areas of action could take care of the grim scenario.

a) No more land should be made available for individual residential plots, as far as possible, and only low rise high density group housing should be permitted for enhanced and optimum utilization of land. Delhi has already taken an initiative way back in the seventies and only group housing through cooperative sector housing with 2 to 3 storey to be taken up. Some of our metropolitan cities are still to come to grips on the above front.

b) Even where individual plots are to be made available, to take care of the socio-economic needs and demands, a major re-orientation on the nature of plots to be developed need to be taken. The time has come for coming down heavily on the plot size and, more importantly, the nature of development on the plots need a very serious review. Even today, the type of residential development of new plots is based on detached housing pattern for open spaces on all sides. Way back in 50s and 60s many metropolitan cities have changed to either semi-detached building or row housing approach.

c) The density of development in most of the residential neigh-

bourhoods has only been achieving marginal levels of efficiency, namely from 60 to 100 dwelling units per hectare. It is, therefore, necessary that this is enhanced to 150 dwelling units per hectare.

d) The existing residential land pockets with single storey development could be further intensified to provide for additional dwelling units, with two to four additional dwelling units.

e) In the residential neighbourhoods which are to be taken up in and around the fringe areas of the existing metropolitan areas care should be taken, to make them as self-contained townships so that the families settle down and they do not face the poor settlement rate as seen in Maramalai Nagar or Yelahanka for lack of social and other community facilities and amenities. Transportation linkage is yet another major felt need for the same.

f) Substantial amount of urban land can be liberated if only the Urban Land Ceiling Act provisions are suitably amended and thus un-locking the available land in the heart of the metropolitan cities. This requires a bold initiative for a change.

.3 Services

All the metropolitan cities are suffering from inadequate levels of services, be it water supply, sanitation; sewerage, solid waste management, transportation or power supply. Though these are important service sectors and are to be taken care of by city level authorities, what is required to be emphasized is, while discussing the subject of housing there is need for related commensurate quantum jump provision of public land to have access to proven services in the cities. However, one significant message that can definitely be conveyed is that conventional solutions do not just meet the needs and use of various non-conventional energy systems would have to be utilized for taking care of the energy needs of housing in the metropolitan cities. This could cover the use of integrated bio-mass related bio-gas units not only as sanitation system but also as an energy producing system as done in Beijing where over 30,000 biogas units take care of the sanitation needs as well as the energy required for home fuel and street lighting. Yet another input that should be taken up is the extent to which waste water could be re-cycled to take care of the city tree plantation and industrial water needs. With the pace of development that is coming up on an increasing level, the possibility of pedestrian cycle track network to be put in the metropolitan cities also needs urgent attention. In India a lead has come in Pune.

2.4 Housing Finance

The study group headed by Shri R.G. Saraiya, Banking Commission have recommended the creation of specialised housing finance institutions to enlarge the flow of savings into the housing sector in 1971. The RC

Shah, working group on housing finance sector by the Reserve Bank of India in 1978 also recognised the need for a specialised central housing finance institution. The 7th five year plan proposes the establishment of National Housing Bank on the lines of the NABARD in order to fill the present lacuna of non-availability of long term finance to individual builders. The National Housing Bank establised in June 1988 at the apex level and a supporting institutional set up at appropriate lower levels is to help the credit needs of the individuals and groups in solving their housing problems and also to facilitate resource mobilisation.
The National Housing Bank has been established :

— to promote new Housing Finance Institution at the Regional / State level.

— to promote new institutions at base level by identifying viable, reliable groups providing seed capital to them as also professional experiments and support in initial year.

— to formulate policies relating to mobilisation of resources and extension of credit for housing including creation of the instruments of savings link to the housing.

— to regulate the working of the Housing Finance Institutions at the base level and coordinate their activities as also those other agencies in the housing field.

— to mobilise resources for housing.

— to identify the impediments—legal and fiscal, physical and environmental and technical to the active involvement of the household sector in the plouging of this saving in housing, and

— to promote measures by way of changes in the law, enactment of new legislation, simplification of procedures etc. to remove them.

2.4.1 Existing Housing Finance System

The existing housing finance system has two broad segments formal and informal. The formal source comprises of :

a) Budgetary allocation

b) General Financial Institutions/ Organisations like LIC, GIC, Commercial Banks and Provident Fund Organizations, etc.

c) Specialised housing financial institutions like HUDCO, HDFC, the Primary and Apex Cooperative Housing Finance Societies and a few housing finance set ups in the private sector.

The informal sources include household savings and private sector employers providing housing loans to their employees. As put forth in the NHP draft policy document for the 8th plan period, the lack of financial resources is a crucial constraint to housing activity for the ordinary individual alongwith the land and services. As the document put forth the rate of savings at the household level is significant. The CSO has estimated the gross domestic savings for 1985-86 at 22% (base year 1980-81) and a net savings at 13. 3%. A study made for the Ministry of Urban Development by the Society for

Development Studies (SDS) disaggregates savings rate into 21% for formal households and 12.1% for informal sector households. In terms of absolute amount and breaking down the CSO estimates the urban savings in 1985-86 was Rs 13000 crores and the rural savings Rs. 6125 crores with an assumption that the proportion of the rural savings is about 30-35% of the total savings. This would mean :

a) Investment from public sector agencies are insufficient. The same will have to be enhanced through proper budgetory allocations for housing.

b) Housing loans on easy terms are not available to potential builders. Housing Finance Institutions oriented towards providing softer loans for individual home construction should be promoted. For this it is essential that savings are mobilised and people advised to invest in home loan account etc. which would go a long way to mop up savings from the public for housing though the savings market is directed by the Government.

c) Savings in construction would also greatly added to the resource generation. For this some of the Housing Finance Institutions like HUDCO do try to maximise the resources by cost ceilings, plinth area restrictions and advocating introduction of cost effective techniques. The cost effective techniques should be brought within a reach of the public by the set up of the Building Centres, reorienting develoment control rules and town planning rules to accommodate these techniques and principles.

It is gratifying that large numbers of Housing Finance Institution (HFIs) have emerged like the HDFC, Can Fin Homes, Vysya Bank Finance, HPMC, Tapoban Housing Finance Ltd, Ind Bank Housing Ltd, etc in addition to the lead given by LIC and GIC for opening separate housing finance institutions. In addition to the bulk financing that is made available by HUDCO, the retail financing contribution by the HFIs would play a significant role in giving the necessary financial resources for housing. The role that would be played by the National Housing Bank in the 8th and 9th Plan periods for increasing the resource inputs in the housing sector is, being watched with great interest.

2 5 Building Materials and Technologies

Building materials contribute 70% of the cost in housing and the balance met by human resources covering professionals, supervisors and, more importantly, artisans' namely ; masons, carpenters, barbenders, electricians, plumbers, etc. With the cost of construction increasing on an average at the rate of 13 to 15% each year as against the cost of living through inflation which is clearly less than double digit, it is becoming a galloping race and challenge to the professionals to have houses built for people at affordable terms. The 4 significant inputs are cost of bricks

TABLE II

***Requirements / Availability of Major Building Materials for* 8th Five Year Plan (1990-95)**

Sl. No.	Material	Unit	For 217.7 lakh dwelling units Quantity Requirement	Availability	Shortage	Remarks
1.	Cement	Million ton	131.98	114.93	17.05	6% growth rate has been assumed. 40% of total production will be available for Housing Sector.
2.	Steel	Million ton	13.94	11.24	2.70	Growth rate has been assumed as 5%. Availability for whole construction industry is 56% and out of which 20% has been taken for Housing Sector.
3.	Bricks	Million	286496	231598	54898	A growth rate of 3% has been assumed per annum for only clay bricks. 80% of total production is expected to be available for Housing Sector.
4.	Aggregate	Million cu.m	555 94	270.35	285.59	The growth rate per annum has been assumed as 6% and availability for Housing Sector has been taken as 40% of total production.
5.	Timber	Million cu.m	29.09	15.75	13.34	2% growth rate has been assumed for timber during 8th Plan on the basis of current availability of 3 million cu.m. 40% of total production is expected to be available for construction

Source : Draft Housing policy, Government of India, Ministry of Urban Development, May 1990

cement, steel and timber, which have lately registered enormous increase in price over last few years (Table 2). It becomes impossible to imagine to construct a house at cost lesser than Rs. 200/- per sft or Rs. 2,000/- per sqm. These costs do become non-affordable for more than 80% of the target groups excepting the super high income groups and high income groups. What is, therefore, needed is a mix of appropriate and cost-effective building materials and technologies so that affordable housing becomes a reality.

One of the critical areas which require the urgent attention of all is in respect of building materials and technologies. The conventional building materials and technologies are by themselves resulting in costs of construction ranging from 1750 to 2500 per sqm. Further, these are not able to meet even the needs of the present middle income housing needs. A slight increase in housing operational levels bring in shortages of materials and thereby increase in costs of building materials. Considering the requirement of major conventional/building materials in the 8th five year plan period, it is noted that based on the requirement and also availability, there is a shortage of over 17 million tons of cement, nearly 3 million tons of steel, over 50,000 million bricks and 14 million cubic meter of timber etc. Even if one has to take recourse to the avilability of conventional building materials, the fact of the matter is that either these are scarce and costly or in short supply. Therefore, there is a need to look beyond and find out how innovative and new building materials and technologies can be identified and harnessed in the housing building system.

Possible recourse have to be taken for manufacture of building materials from various agro-industrial wastes like fly-ash, red mud, phospho gypsum, coal rejects, jute stalk, coconut husk, coir waste, saw mill waste coconut pith, etc.

Over 150 million tons per annum of agricultural and industrial wastes are available in the country. The various thermal power plants generate besides power also fly ash which is of the order of 30 million tons. The Fertiliser factories bring out by-product of phospho gypsum of the order of 5 million tons annually. Red mud, considered as waste from aluminium plants again account for nearly 2 million tons per annum. Blast furnance slag waste from Iron and Steel Industry is of the order of 9 million ton annually. Further, agricultural wastes like rice husk, straw, saw mill waste, coconut husk, coir waste, pith, jute stalk, sisal, ground nut husk, etc. and other biomas material, amount to nearly 60 million tons annually. Therefore, the strategy that is being envisaged in the National Housing Policy in respect of building material and technology has been to go in for a package of measures.

In addition to efforts to manufacture building materials utilizing the above alternatives, what is required is to give appropriate support through building material estates, building material markets, and super bazaar

outlets where all building materials required for housing could be made available to the people. Further a major thrust would be required for imparting appropriate training and skill upgradation for the various artisans like masons, carpenters, barbenders, etc, on cost effective building technologies. This is a major gap and unless this is bridged, there is no hope for introduction of housing solutions at affordable terms even though these are proven technologies.

2.6 Human Resources

As indicated in section 2.5, human resources account for 30% of the cost. Even though construction sector contribute to the second largest source of employment, next only to agriculture, this is one of the most dis-organized and unattended groups. There are over 25 million construction workers in the country. The problem is more acute in the metropolitan context. With the fast development taking place there is a massive influx of construction workers from rural hinter land who come to the cities for building houses for all and shift from site to site as nomads and finally settle down in squatter settlements. It is, therefore, desirable that these construction workers (skilled, semi-skilled and un-skilled) are provided with the right amount of training and skill upgradation training so that they are able to handle the type of construction activity utilizing traditional, modern and cost-effective construction systems. The Building Centre movement through the network of Nirmithi Kendras, Kattida Maiyams or Building Centres holds *the key as the right solution for* this important human resource development need. Similar efforts are required at professional and supervisory levels. In addition to the conventional professional input of architects and engineers, the human settlement needs of *informal sector require a software discipline of social* scientists and sociologists through the establishment of urban community development groups, who have played a major role in housing needs in many cities like Hyderabad. The urgent need therefore needs to be strengthened in all the city level agencies *dealing with housing* in small names, *urban development,* city level, etc.

2.7 Delivery System

Predominantly, the efforts for housing delivery in metropolitan context is taken by the individual and private sector and the contribution of the public sector, namely, Development Authorities Housing Boards, Slum Clearance Boards, Local Bodies, etc is only of the order of 20% or lesser. Therefore, what is needed is the right type of replay increasing the role of 'facilitator' and less and the cooperatives and individual groups to build homes. The corporate sector would also have to be brought in a big way as for every new industry or institution in the metropolitan cities it also creates a housing demand. While agencies take care of the employment needs, it also brings in housing crisis. It is to be consisdered whether new industries and institutions generating additional jobs could also be asked to chip in their contribution for housing for the employment gene-

rated by the enterprise. Cooperative group housing movement which has not been receiving support, excepting for Maharashtra and Gujarat, needs to be given a major fillip. It needs to be encouraged for registration of societies for making affordable bulk land so that this would serve the twin purpose of optimum utilization of land and also increasing the pace of housing delivery. Otherwise, in most of the metropolitan cities, the contribution of public housing agencies is ranging between 2000 to 5000 houses each year with very large organizational set ups provided.

It is also necessary to encourage private sector builders. Their contribution, even though marginal, do take care of only the housing needs of the super high income and high income category. Their potential should be tapped to cover the needs of the middle and low income housing as well. There is also a great need to professionalise the contribution of private sector builders so that their working system are streamlined with a clean track record for delivering houses within time, within cost, within quality and most importantly, above board dealings. Otherwise, this can distort the housing supply market with the working of a parallel economy. There are many established private builders emerging with dealings above board and such efforts should be encouraged by the State Government and city authorities.

What is needed is the right type of facilitator role through appropriate Housing Guidance Centres, Housing Information Centres, Housing Councelling Centres, etc, to be located in different metropolitan cities of the country on the lines of the Building Technology Exposition and Housing Guidance Centre set up in the HUDCO Southern Zonal Office at Madras and also back up support for appropriate delivery system through manufacture of building materials, components and also supply trained work force.

There is also a need to make a major change in the existing legal instruments for mopping up of additional housing units through Rent Control Rules, Urban Land Ceiling Act, Land Acquisition Act, Stamp Act, etc.

Efforts would also be required to encourage development of rental housing of a larger order for providing for single women and bachelor accommodation for those who are working in metropolitan cities. At present, excepting for a few ladies hostels, the single men look up to lodges which do not provide for the right type of accommodation. This need alone comes to around 15% of the urban population in metropolitan cities. If these are taken care of in a sensitive manner this would partly alleviate the housing problem.

3. Conclusion

The nineties are going to witness a major resurgence in the urban land scape of metropolitan cities of India. New initiatives in respect of land assembly, technology options, housing delivery systems are, therefore, called for. All these poses an enormous challenge needing urgent attention of housing agencies and the public. It is how we convert these challenges into opporunities that our performance would be evaluated.

Summary of Discussion

While considering the challenges posed by the housing crises in the million plus cities of India, Mr. V. Suresh opened up a discussion on new and needy initiatives in respect of Land Assembly, Technology Options and Housing Delivery Systems. He swiftly went through to explain the six major resource requirements for housing — land, access to services, finance, building materials and technologies, human resources and delivery systems — and the constraints for these in metropolitan housing systems. He especially voiced out that urban housing schemes are often geared to serve the High and Middle Income categories, and the lower income groups or the "Informal sector" start dealing with cities in a destructive way.

A lively discussion followed his presentation which covered issues regarding the 'Decaying core', 'socialisation of land' and the desirable 'life—span' of housing constructions. Prof. Neelakantan quoted the price theory to say that if the price of any commodity kept increasing further and further, it would eventually lead to its decay, though planners never seem to think it possible for urban land, while objection was raised, he said that Detroit was already dying on this account, and to stop such mishaps in India, pure privatisation is the ultimate solution. However Prof. Kurien put an alternative solution namely, to encourage the concept of socialisation of land, which when properly practiced would avoid many of our Urban Land crises.

Speaking about the poor construction of Housing Boards—Mr. Suresh included private construction too — the issue of a desirable life span was discussed. Even if one puts his earnings of about five to ten years as investment in housing, it becomes futile in a few years, unlike as in the Singapore model which guarantees 99 years of construction efficiency. In this context, an understanding was reached that and, economics is more important than life span discussions, since the pace of urbanisation keeps calling for swift changes in land designs to accommodate the evergrowing urban population, and infact only group housing should be permitted so as to enhance the optimum utilization of land. Mr. Dattatri noted that the public housing agencies should only play the role of 'facilitators' thus alloting serviceable land to industrial groups and co-operatives to build their own houses.

A significant message conveyed was that Urban planning is taking a new

turn towards developing the outer fringes of cities and towns so as to reduce the "pull" of these areas, as also to take facilities to them as a measure to develop areas uniformly. When Mr Suresh opined that satellite towns should be developed at a considerable distance from city proper so that they do not simply become extensions of the crowded city. Paul Appasamy brought in the need for subsidised transportation costs for the poor workers who have to travel long distances. The planners showed optimism about the Madras Rapid Transit System in serving the needy even if they be away from the city centre.

Considerable regret was expressed about the investment patterns in outer areas, because those plots are often bought by people who already have sufficient house ownership, thus again depriving the landless an opportunity to buy. Also bulk land under private ownership are pieced out to small buyers without any initiative to develop the infrastructure in these areas. Hence, Government control over such issues was considered very crucial.

While criticised that his paper was largely focussed on the middle and high income groups, Mr. Suresh clarified his position on the contrary, and especially briefed on the kinds of schemes they have for the EWS: 'Land Bank' for shelterless colonies, 'planned upgradable sites' or areas of squatters to be upgraded, and 'night shelter units' for wage labourers who do not stay with family. Single women and bachelor accommodation units were also to be considered.

The meeting ended with an expressed need for major changes in the existing system and more efficient legal instruments like Urban Land Acquisition Act, Urban Land Ceiling Act, and even new introductions like the vacant land tax, so as to alleviate the urban housing issues that are reaching unsurmountable heights.

AKILA

Some Suggestions on Publication Policy of Universities*

A. It was noted that there are three viable "models" of publication policy in South Indian Universities for emulation by others:

The Karnataka Model pioneered by Mysore University and followed by Bangalore, Karnataka and Mangalore Universities with 'PRASARANGA', the publication department.

ii. The "Osmania" (post merger period) model where text book publication has been taken over by "Telugu Academy" and other research publication is handled by the university, and

iii. The Tamil Nadu Agricultural University Model where research and popular publications are encouraged and the research findings are annually abstracted and sent to all other agricultural universities.

(The meeting took note of the fact that the oldest University in South India, Madras, as well as many other Universities do not have any publication policy of their own.)

B. It is desirable that important findings in doctoral research be published either before or after submission so that the scholarly community would have opportunity to comment on it and a consensus on it might emerge.

C. The provisions of the universities to confer doctoral degrees for theses approved with the condition that they are not fit for publication should be reviewed because of its contradictory nature.

D. The starting of an Inter-Disciplinary Journal for promotion of Social Science Research in South India is recommended for consideration by the Indian Council of Social Science Research.

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* Statement of the Meeting of Heads of Social Science Departments held at the Madras Institute of Development Studies on Jan. 19-20, 1991 of Bangalore, Bharathidasan, Hyderabad, Karnataka, Madras, Madurai Kamaraj, Mangalore, Mysore, Nagarjuna, Agriculture (Madurai) and Osmania Universities.

E. A preponderent majority of students answering questions in Regional Languages in University Examinations points to the urgent need for continuation of production and publication of text books in regional languages by the universities.

F. The double responsibility of each member of the academic community (i) to pursue research and (ii) to communicate and react with other members of peer group is emphasised.

G. The responsibility of the Universities Publication Sections to employ professional people for editing, referencing and indexing is stressed.

H. The need for improving facilities for research in Social Science by universities and to exert pressure on the academic community to actively pursue research is advanced.

I. Periodic academic audit of teachers is affirmed.

J. The policy of Osmania University that the content of publications impinging on excitable issues, and of the the Agricultural University that publications relating to immediate sensitive policy matters, require prior approval by the University is approved.

K. For promotion of publications. an incentive structure through grant of special leave, research grants, honorarium for text book writing as well as academic recognition for writing in regional languages is suggested.

L. Taking into consideration the escalating cost of publications and the difficulties in marketing, arrangement with commercial publishers for undertaking costly distributive responsibilities is endorsed.

M. As the price of the average important book is getting beyond the reach of individual teachers, it is suggested that the libraries should purchase more than one copy of such publications in order to promote cultivation of the reading habit and access to research reference materlal.

Publication Abstracts*

Nasir Tyabji : **The Genesis of Chemical Based Industrialisation, the Case of Oil Seeds in Madras Upto the Depression**

Working Paper No. 93, February 1990 PP. 57

It is by now well recognised that the Industrial Revolution in Britain in the late 18th century was only the first in a series of transformations of the industrial structure that evolving economies undergo. In its most simplified form, historians of technology recognise at least two more successive land marks, the chemical or more broadly speaking, continuous processing, revolution of the late 19th century, and the information revolution of the post Second World War Period.

The location of technologies in terms of the era in which they originated is important in assessing the degrees to which the older industrial economies have successfully transformed their industrial structure. They are also useful in terms of analysing the processes of industrial development, such as they were, in countries like India during the colonial period. It is possible, then, to distinguish between the growth of industry in the sense of the relocation of old established industry from the then industrialised world to India, and the growth of Indian industry of a nature similar to that currently evolving in the industrial centres.

In this paper, the focus is on the major raw material base, oil seeds, and on the several variety of constraints and problems that concretely influenced the prospects for the chemical based industries in Madras Presidency in the period leading upto the depression of the 1930s.

Oilseeds present an important case study for many reasons. From an economic point of view, they were one of the major commercial crops and items of export for the Presidency. In the absence of any significant mineral deposits they were also the major base on which chemical technology could potentially be based. Thirdly, the extraction of the raw material, oil, from the seeds was a mechanical process, with a pre-existing base in the form of the widely dispersed village ghanis or chekkus, and their derivatives.

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* Abstracts of the Publications brought out in the Institute from February 1990 to January 1991

Although castor, gingelly and cotton seeds were all available in the Presidency and the first two grown on a commercial basis (the cotton seeds were a by-product of cotton cultivated for the textile-industry), it was groundnuts and copra made from coconuts which were the prominent oil seeds investigated for industrial application in Madras. This paper concentrates on these two seeds, and covers the period from the formation of the Chemical Industries Committee in 1909, to the beginnings of the depression in 1927. The subsequent period involves economic and political influences of a quite different nature and is the subject of another enquiry.

Although the distinctive trends in the behaviour of the groundnut and copra based economies had not delineated themselves fully by the end of period under consideration, certain broad features are apparent While the foreign exports of groundnut and groundnut oil would seem to have stabilised, although at levels distinct to the pre war period, coconut oil exports had a tendency to decline.

This paper attempts to show the factors underlying the two trajectories. The overseas groundnut oil market appeared to be one that was difficult to supplant. The interests of Indian suppliers, British exporters and the Government of India's fiscal requirements all militated against the replacement of groundnut export by groundnut oil exports to Europe (the bulk of oil exports were to the plantation workers in Ceylon and (Mauritius). The use of groundnut derived products in India faced the additional handicap of of the low incomes of the bulk of the Indian people.

Coconut oil exports seem to have faced a different set of circumstances. Initially, the climate on the Malabar Coast which allowed oil pressing in a single cold pressing seems to have encouraged the development of a competitive oil pressing industry on the coast. However the two significant developments described in this paper, the experiments on coconut-oil based soap, and the establishment of the Tata Oil Mills Factory in princely Cochin were decisive in reorienting the destination of copra products. While Tatas had set themselves the task of breaking into the metropolitan Indian markets for coconut oil, the Kerala Soap Factory generated a demand for soap leading to a derived demand for coconut oil. What also seems to have been significant was the location of the Soap Factory on the Malabar Coast, and the concentration of technological experiments on the most easily available oilseed, copra.

It would seem, then, that a combination of the right natural environment, the presence of a firm backed by substantial Indian capital and the entrepreneurship exhibited by officials like Frederick Nicholson and Kesava Menon led to the progress observed in the development of the copra based industry. Similar features were not present in the case of groundnut.

Malcolm S. Adiseshiah : **Mid Year Review of the Economy 1990-91.**

Working Paper No. 94, October 1990, pp. 192

An Apercu

At this mid year point, the economy in 1990-91 presents positive

and negative elements. On the positive side, it has prospects of a good monsoon for the third year in succession, which should result in reaching the foodgrain target of 176 million tonnes and adequate yield of oil seeds, sugarcane, cotton and the jute crop. The industry perspective are equally hopeful, as mining is improving (except that the floods are temporarily holding up work in the eastern coal fields). Manufacturing industry has picked up to its 1989-90 growth rate in major industrial groups, except for consumer durables, and electricity is likely to surpass last year's performance. The essential infrastructure of services will contribute a third of the national income in 1990-91. It will be noted that no overall rate of growth of the economy for 1990-91 is forecast, unlike that of 1989-90, where an overall growth rate of 4 to 4.5 per cent and a per capita growth of 2.3 per cent are estimated, with the VII Plan recording for all 5 years a growth rate of 5.2 to 5.5 per cent and per capita growth 3 to 3.4 per cent. The reason why such an overall forecast is not made is because this repeatedly stated that the growth rate is misleading : further the Planning Commission has down graded the overall growth rate approach, and is concentrating instead on the performance of individual crops, manufacturing groups etc, which is an indication of both the real performance of the economy and its impact on the well being or ill being of the people. The Approach Paper to the Eighth Plan lays down the broad guidelines of development in each sector, which is both a continuing of the past trends, along with some much needed innovations. In planning, the decision to decentralise plan formulation and execution to the states and to elected local bodies will bring about change during the year, the result of which cannot be foreseen now. One innovation is to increase the total investment in agriculture and rural activities to 50 per cent of plan and non plan outlays, and its implementation which has started in 1990-91 raises question of what is to be included under agricultural and rural outlays and whether the target, even if the methodology of its computation is settled, will be attained in a phased manner over the Eighth Five year Plan.

On fiscal matters, the first major negative element for 1990-91 comes into play, and that is the very high revenue deficit of over Rs. 13000 crores which has been brought down to Rs. 7200 crores by use of the capital account surplus. The question here are a) the use of capital account resources to finance current account expenses, particularly the run away non development expenditures, and b) whether the amount of the deficit which is still high can be held to that amount, without the establishment of monetary ceilings recommended 3 years ago by the Sukhumoy Chakravarty committee, and accepted by the government but not implemented. The other fiscal issues is the effect of the Ninth Finance Commission awards on the finances of the states and the alternative to the Award proposal in the Review.

One direct effect of the fiscal imbaance is the growing public debt, internal and foreign, which is the second negative point in the economy. On internal debts, the burden of interest payment has reached a point where the net proceeds of market borrowings in 1990-91 are gradually declining, adding to the go-

vernment's resources crunch. On the foreign debt, which is related to the Balance of Payments pressure, the level of Rs. 100,000 crores of indebtedness places India in the fourth rank of the world's largest debtors, and raises the debt service ratio to 30 per cent—a danger point being stressed by the Finance Minister.

A third major negative point in the economy in 1990-91 is the continuous rise in prices-both wholesale and and consumer-in the first two quarters of the year, so that the current inflation rate of 9 per cent a 12 month period, might well lead to a double digit deficit inflation figure for the year.

In agriculture, as noted earlier, because of the good south west monsoon, all the foodgrains and cash crops are doing well. The questions of emphasising the agro climatic zones approach, the extension of the minor irrigation, the dry land farming expansion and water shed development are raised. One major issue which is still under discussion is the agricultural policy of the country-comparable to the Industrial policy resolution. The many issues on agricultural prices, imports, credit and infrastructure for the farming community are urgent and raise questions which may carry beyond 1990-91. The need for improving the measuring and forecasting machinery for cotton and oil seeds are particularly stressed, as well as the urgent need to make a break-through in pulses production.

In manufactures, there is an unresolved question at this stage as to how manufacturing growth could be increased by a high 19 per cent in the last quarter of 1989-90. This may affect the growth record of manufactures in 1990-91. The new industrial policy is reviewed and questions raised on three of its provisions — on the import of 30 per cent of capital goods by the entrepreneurs at concessional duty rate, on imports of raw materials and components by them, and the freedom for foreign investors to invest upto 40 per cent in any company. The problems of capital intensity of the manufacturing sector are examined with recommendations, switch over from producing capital guzzling consumer durables to wage goods and intermediates. The opening of the steel sector to private enterprise is welcomed as the means of closing the supply and demand gap. The problems of small scale sector which has a crucial role to play in the new employment dominated economic policy is analysed. The problems of industrial sickness and means of curing it are suggested. In the public sector, the possibility of shedding non essential and pereninally loss making enterprises which are identified is recommended. In the private sector, the problem of their export intensity is examined and its investment trend in 1990-91 forecast. Individual industries are selectively examined and the problems in each, notably in automobiles, fertilisers, textiles and drugs and pharmaceuticals analysed.

The infrastructure comprising crude and gas, electricity, coal, railway and shipping and non conventional energy is examined in relation to 1990-91. Here the opening of electricity to the private sector will provide some relief, particularly to manufacturing industry which bears the major burden of power cuts. But the private sector's contribution to total power supply will be minimal in the first years and its tariff will be higher than that of the state supply.

Human Resources tasks in 1990-91 are setforth, with some corrections on what is officially proposed such as "the total overhauling of its educational system". It is recommended that technology in the year should follow more closely the 1983 Technology Policy Statement and depend more on internal R & D.

The Savings and Investment section brings out the *urgency* of raising the gross domestic savings from the 20.5 per cent of GDP in 1989-90 to 21 per cent in 1990-91 as a step to move towards 22 per cent in the Eighth Plan. The means of doing so is shown to be only means of not continuing to rely on foreign investment as a means of industrial growth in 1990-91. (The Reserve Bank's preliminary estimate is that domestic savings have risen from 20.8 per cent of GDP in 1988-89 to 21.4 per cent in 1989-90).

The Balance of Payment deficit which is the fourth minus point is examined and its relation to the fiscal deficit, to inflation, to foreign borrowing is brought out. The suggestion here is not only to increase exports and cut down on imports as a means of reducing the trade deficit, but also to improve the inflow on invisibles through certain policy and pragmatic steps. In fact unless the balance of payments deficit is corrected, India's position in its trading relations with the industrial countries, in GATT, in dealing with the US Super 301 will be adversely affected.

How all these facets of the economy contribute to the employment generation objective is then examined. Here two issues are highlighted. First, taking the backlog of unemployment from 1989-90 which is 28 million and adding to it the labour force in the Eighth Plan of 37 million, the need to create employment for two thirds of that number. Second, the pledge of the Right to Work is examined and its workability set forth.

Finally all this activity must result in improvement of the standard of living of the ordinary man. What does that mean and by how much can it be improved? Here the data on poverty made available by the World Bank and three ministries of government are analysed and feasible programmes of poverty alleviation and inequality reduction are proposed.

All the above data needs to be modified and updated as a result of the Gulf crisis and war. The *Crude Oil Import* will increase by Rs. 4700 crores, the loss in *Remittances and Deposits* will be Rs 400 crores the loss on *Exports* will be Rs. 360 crores, the loss on *Contracts and Work* by Indian firms will be Rs. 400 crores. So the *Balance of Payments* will worsen by $3 million.

The effect on *Prices* will be largely as a result of the hike in oil prices, to push the level to something between 12-13 per cent for the year.

The effect on *Savings* will be to make it more difficult to attain the year's target of 21 per cent because of the loss of remittances and the fall in NRI deposits.

The effect on the *Budget Deficit* will be to increase it to around Rs. 10,000 crores.

M. Thangaraj: **Trends in fragmentation of operational holdings in India : An exploratory analysis**

Working Paper No. 95, October 1990, pp. 54

This paper seeks to examine the nature and trends in the fragments of operational holdings for rural India. The data with respect to number of parcels in the holdings and average area per parcel were collected from the NSS report, no. 144 (1961-62) and 331 (1981-82). The focus of the study was to present and compare the data at all India and at the state level. The result of the study indicates the average number of parcels per operational holding has declined and the average area per parcel has increased over a period of 20 years (1961-62 — 1981-82) at all India level. The state wise analysis shows that four states viz., Madhya Pradesh, Punjab, Tamil Nadu and Uttar Pradesh have made substantial progress in the reduction of fragments per holding and increase in the average area per parcel ; nine states viz., Andhra Pradesh, Bihar, Gujarat, Jammu and Kashmir, Karnataka, Kerala, Maharashtra, Orissa and West Bengal have made progress but not substantial ; and the other two states viz., Assam and Rajasthan have made no progress. Thus the result of the study shows that there was a reduction in the fragments per operational holding and increase in the average area per parcel and the problem of consolidation of holdings was not so acute in 1981-82 as in 1961-62. The author attributes the progress in the consolidation of holdings to the Government intervention through legislative measures, sale of land (fragment) to the contiguous land owner and voluntary exchange of land among the farmers.

S. Guhan: **Social Security Initiatives in Tamilnadu 1989**

Working Paper No. 96, December 1990, PP. 67.

The paper begins with a discussion of the role in India for protective social security measures which seek to provide guarantees or entitlements to those affected by specific contingencies such as unemployment, sickness, maternity, old age and death of the breadwinner in the family, by compensating them for the loss of income and/or additional expenses arising thereby. Against this background, the paper describes and evaluates a set of social security initiatives that were launched in Tamilnadu in 1989 with the advent to power of the DMK Government. These consisted of the liberation of (i) the old age and other pension schemes and (ii) the accident relief scheme. and new schemes for providing (iii) survivor benefits (iv) marriage grants and (v) maternity assistance to eligible beneficiaries belonging to households under the poverty line. Together these initiatives represent a major experiment in social assistance for poor families in the unorganised sector.

The evaluation estimates target population in Tamilnadu as a whole and district-wise in the first year of their operation. It shows that the number of beneficiaries under pension schemes—old age pensions, agricultural labourers pension. widows pension, deserted wives pensions and physically handicapped pension—has increased from 3.73 lakhs on 1-4-89 to 4.72 lakhs on 1-4-1990 i.e., by about 27 per cent. In the first year of operation, the survivor benefit scheme has benefited 20,990 families, 2.19 lakh women have received maternity assistance, and 19,687 girls have received the marriage grant. Assuming that 40 per cent of the population falls below the poverty line, the coverage under surviver benefit and marriage grant schemes represent about 60 per cent of the estimated target population while the coverage in the maternity assistance scheme is 90 per cent. Of the total beneficiaries under

the pension schemes and the new schemes, 57 per cent are women. Inter-district differentials are broadly, consistent with variations in the poverty level. The total annual cost in these schemes (including the preexisting costs and the additional cost of the new initiatives) is estimated at 0.4 per cent of Tamilnadu's NSDP in 1989. It has been possible to contain administrative overheads to about 4 per cent of outlay because the schemes are implemented through the regular staff of the Revenue, Social Welfare and Rural Development Departments. The evaluation concludes with some suggestions for improving the iimplementation of the schemes.

The final section of the paper explores the possibility of introducing an all-India wide 'minimum relevant' social security package based on the Tamilnadu pattern, but confined to (i) old age and other pensions (ii) survivor benefit and (iii) maternity assistance. The annual cost of such a package is estimated at about Rs. 1500 crores or not more than 0.4 per cent of India's GNP in 1989-90. The paper argues, after a discussion of issues relating to adequacy, sustainability, affordability, and benefits, that such a minimum necessary package could be feasibly implemented with the costs being shared by the Central and State governments. What is required is the will to do so at the Centre following the model set by the DMK Government in Tamilnadu in 1989.

S. Janakarajan : **In Search of Tanks : Some Hidden Facts**

Working Paper No. 97, January 1991, pp. 38

It is needless to emphasize the significance of tank irrigation system since this is one of the most important sources from time immemorial in most parts of Southern India. The official statistics however shows that there has been a steady decline in the area irrigated by tanks over a period of time. The decline and decay of the tank irrigation system has been the subject of considerable discussion atleast since the middle of 19th century and of late, this issue has attracted the attention of policy makers and academicians a great deal.

Nevertheless, one crucial issue which remains largely neglected by all concerned is the aspect pertaining to the changing characteristics of water users, namely, their number, size of holding they operate, ownership pattern of land in terms of both caste and class, mode of cultivation, level of development of productive forces, development of alternate source of irrigation and so on. This calls for a thorough examination of factors which have contributed for the disintegration of traditional community maintained tank irrigation system or what is referred as traditional irrigation institution.

Basically, two sets of factors have been identified for the decline and decay of traditional irrigation institutions : They are physical / technical factors and institutional factors. While discussion at a great length takes place on the physical / technical factors, the discussion on institutional factors are either sketchy or nil. The set of physical / technical factors which have contributed for disintegration of the system are heavy silt accumulation and encroachment in the catchment area, inlet channel and in the tank bed, poor and damaged

conditions of regulatory and control structures, neglected conditions of tank bund, inadequacy of funds for regular maintenance work and so on. The set of institutional factors are, changes in the land ownership from upper caste to hitherto cultivating castes ; increase in the sub-division and fragmentation of holdings ; development of well irrigation in the *nanjai* ayacut on a large scale resulting in the emergence of irrigation water a private property — a private property for those who have greater control over productive resources ; emergence of absentee land owners and so on.

This paper emphasises the point that these technical / physical and institutional factors do not act in isolation but they are complex and often interact.

Nasir Tyabji : **Industrial Development in South India 1880-1947.**

Working Paper No. 98, January 1991, PP. 98

British South India in the 19th and 20th centuries consisted of five major and distinct political entities—Madras Presidency, and the Princely States of Hyderabad, Mysore, Travancore and Cochin Conventionally, only Madras Presidency would be treated as part of "British" India; however in this paper, considerable emphasis will be laid on the fact of the relationship between the decision making autonomy in each of these political entities, and the fact that this autonomy was very largely determined by the paramount power—Great Britain through the Government of India which was responsible to the Secretary of State for India.

There was a further factor as far as economic policies, industrial development policies in particular, were concerned. This lay in the speed of development and in the growth of consciousness and articulateness of a business community, initially perhaps content with a purely trading role but increasingly assertive of its rights to enter the field of industry proper.

In this paper, industrialisation has been viewed as the process by which the business community accumulates, as reflected mainly by its control over a greater range of enterprises, though also by technological change within enterprises. Central to this process in a colonial economy such as India's, is a consideration of the developments within cottage or household industries. While historically, hand production on a small scale has usually been superseded by large scale machine production, there are also exceptions, due to the specifics of the raw material used or the nature of the finished article.

In colonial South India, there were four major industries of the household kind that need to be considered. These were the cotton handloom weaving industry (mainly in Madras and Hyderabad), the sericulture industry (in Mysore) and the cashew and coir industries in Travancore and Cochin. While the cotton handloom and sericulture industries represent "traditional" industries in that hand weaving and silk spinning have been undertaken in India for a very long time, the other two are of recent origin and are due to the initiative of colonial firms. Coir weaving originated in 1859, while significant cashew production started as late as 1925.

One result of the greatest importance that recent research has identified is that developments in these industries in terms of the ways in which production was organised depended not only on the nature of the market and the technology in use. Decisions on whether production was to be organised in the homes of producers, or in centralised workshops, and on the different modes of payment in these arrangements had also to take account of the demands raised by a militant trade union movement. This was particularly the case in Travancore, and in both the cashew and the coir industry, there are examples of a phased retreat from more organised forms of production in workshops to that of household based production. On the other hand, in the handloom industry there was a certain growth of production in centralised organisations, even though aggregate employment in the industry fell. In other words, the processes of industrial development are not only made more complex by the presence of the household industries, but within such industries the processes were often quite distinct.

South Indian industry which, at the time of independence, was showing faint signs of progressing to the stage of chemical based technology, was predominantly based on the production of agriculture based consumer goods. Ferrous metallurgy could not develop in the absence of suitable coal deposits, inspite of the large scale presence of iron ore. The problems of attempting to overcome this handicap were well shown in the example of the Mysore Iron Works. In Travancore and Cochin, the absence of even a medium section of indigenous industrialists made the diversification from coir and cashew to modern industry precariously dependent on public sector investment, or on the slim possibility of attracting large capital to a geographically isolated part of the country. In Hyderabad, an acute political struggle against the Nizam's autocratic regime dominated all other issues until the formation of Andhra Pradesh State almost 10 years later.

All-in-all, pre-independence industrial development had left an uneasy legacy for post independence South India.

Padmini Swaminathan : **State Competition with Private Enterprise : The Case of Manufacture in Jails in the Madras Presidency**

Working Paper No : 100 January 1991, pp 44

This paper traces the controversy that arose in the Madras Presidency between the English mercantile community and the State Government over the issue of manufacturing in jails which the mercantile community dubbed as State competition with private enterprise.

We begin with a documentation of the principles and policies enunciated by the Government of India periodically modified to take into account,

(i) Governmental requirements in terms of making the jail pay for its own upkeep ;

(ii) Prisoner's requirements in terms of making them work not only for their own maintenance but also in the process equipping them with some industrial skill in the hope that this would help them in life after prison ;

(iii) The need to keep interference with private enterprise to the minimum.

Our next section deals with the functioning of jails in the Madras

Presidency; the specific policies enunciated based on the Government of India's guidelines, the Committees set up in the State to deal with this matter, the periodic reviews undertaken not only to streamline the functioning of the jails in the Presidency but also to expand the manufacturing activities given the Provincial Government's commitment to foster and strengthen jail industries.

In the third section we enter into the controversy proper between the Government and mercantile community over the whole question of 'undue' interference by the State, with private enterprises. The details surrounding the controversy document :

(a) The utter insensitivity of the commercial community (and therefore their selfishness) to the whole question of reformation of the prisoner as revealed in their insistence on the point that "jail labour ought to be before all things *penal*" (emphasis added) ;

(b) The differing perception of the mercantile community and Government officials (both British) over the question of the role of the State, and the admissibility of the latter's intervention in areas that the English commercial community asserted belonged to the domain of the private sector ;

The controversy spanned a period of almost four and a half to five decades. We begin our discussion with the Resolution of the Government of India on the issue in 1886 and end with the beginning of the Second World War by which time the intensity of the controversy had petered out.

Padmini Swaminathan **: State Intervention in Industrialisation : A Case study of Madras Presidency (South India)**

Working Paper No. 99 January 1991, pp. 57

This paper aims at exploring at the regional level, in a concrete manner, the attempts made by the provincial government of the Madras Presidency largely on the initiative of one of its officials, Alfred Chatterton) to foster some form of economic development through a demonstration of the commercial success of certain lines of business pioneered under state patronage, and through its concern for developing industrial education in the state. This initiative on the part of the provincial government brought it into sharp conflict with the European mercantile community of the country in general and of the province in particular who saw in the action of the state, a threat to their own interests. The analysis of the tension created between the provincial government and the mercantile community over state pioneering/promotion of industries brings into sharp relief not only the differing perceptions (over the role of the state) between officials and businessmen (both British) *within* a province, but also the difference in perception *between* a provincial government and the imperial authority.

It is also the proposition of this essay that this intervention of the provincial government cannot be reduced to merely a case of benevolent state action. In the first place the state (and specially its most vocal spokesperson, Chatterton) perceived its action as being primarily an attempt at securing the preconditions necessary for (colonial) capitalist development in the long term interest

of the British nation. Secondly, Chatterton, while taking on the combined opposition of the British mercantile community and apparently emerging as the hope of the Indian business and political community, nevertheless symbolized the dominant viewpoint held by the British of Indians as a backward, superstitious, indisciplined nation, which, therefore, justified the need for rapid enactment of reforms based largely on western political, social and economic theory.

The rest of the paper is divided into separate sections, each dealing with a specific activity, which was either initiated, developed and/or in which Chatterton had a major role to play. This segmentation enables discussion of the individual and peculiar problems of each of the activities, the depth of Chatterton's understanding of the problems and his reaction to each, the degree of state intervention and concomitantly the degree of controversy surrounding each (given the strong opposition of the European mercantile community to what was termed state-sponsored industrial activity).

The final section highlights the controversy at the national level leading to the eventual closure of the industrial department of the Madras Presidency. The period covered in the paper spans two and a half decades (1890 - 1915) roughly from the time of Chatterton's active involvement in industrial activity of the province upto the loaning of his services to the Mysore Government and the setting up of the Indian Industrial Commission.

S. Thirumalai Velayutham: **Property Rights Theory — A Survey of Recent Literature.** Digest Series No. 6, November 1990, pp 50.

In this survey we have attempted a critique of different approaches of the New Property Rights Theory on the problem of resource allocation.

On resource allocation, the neo-classical paradigm held the view that 'market mechanism' would be the efficient allocater of resources. The logic of competition suggests that market could solve the problem of resource allocation through exchange prices, while discussing the various market possibilities. However, the issues such as public goods, externalities, transactions cost etc., could not be handled effectively by the market forces. The proponents of the 'Property Rights School' (PR School) in their new approaches found an effective alternative in solving the problems arising out of public goods, externalities etc.

The PR School believed that the neo-classical paradigm could be improved upon by retaining its basic elements such as rationality, competition and scarcity and by incorporating into it the elements of property rights paradigm such as 'inter-connectedness of ownership rights, incentives and economic behaviour'. According to this school, the 'property rights' are as fundamental to economics as rationality and scarcity. The function of property rights is to create incentives so as to use resources efficiently. Of the 'liberal concept of ownership' and 'free market' the PR School focuses and concentrates on 'market intricacies', leaving out the 'ownership question'.

The approaches of different schools of thought varied significantly ; however the unifying theme in the body of

iiterature has been to *find a solution* to the ecocomic problem of resource allocation by putting into it the 'private property structure' and within the scheme of neo-classical production and exchange analysis. The PR School points out that exchange solutions to the resource allocation problem reflect a distribution of income determined by the existing structure of property rights and knowledge-base that determines the preference for production technology.

There are three major schools of thoughts: viz., neo-classical school; (which we have discussed earlier) the public choice school; and the Austrian school of economics. The public choice theorists relate individual maximising behaviour to the choice of social rules by replacing individual voting behaviour. In their framework property rights matter in the sense that, the well-defined, enforceable and transferable property rights are essential for efficient allocation of resources and for the avoidance of 'market failure'. To them, property rights themselves are a product of 'market'—like forces. The Austrian School is characterised by extreme individualism in its methodology. Rational maximising of profits and utility by firms and agents respectively are assumed as found in the neo-classical main-stream. To them, two classes of 'endogenous' institutions of paramount importance are the 'market' and the' system of property rights'. The market system is seen as a process in which individuals voluntarily interact with one another in pursuit of their own interests with appropriately designed (such as well-defined and enforceable) property rights. The freedom of contract, freedom of exchange; and the enforcement of contracts with the self-interested behaviour generate a spontaneous order. In brief, *unfettered market* exchange maximises the freedom of choice.

In order to provide a single analytical framework and to extend the scope of mainstream economics, a 'theory of State' has also been developed by a member of the school which removed a gap that existed in the mainstream economic analysis.

Some of the methodological deadlocks found in the neo-classical paradigm, especially the individualistic approach to the society have also been examined in the paper. Further, the inconsistencies in assuming away the existence of an *initial* 'property structure' and maintenance of 'status-quo' has also been highlighted. The individualistic notion of the society negates the aspects of social stratification, either in terms of classes of individuals or their differens social roles in fact, remained alien to the neo-classical approach. Howevert these approches have also made some significant positive contributions on the existing body of knowledge on 'efficient' allocation of resources. For example, the existence of transactions cost has been brought to light.

Our main contention in the paper is to point out that 'the problem of property' is not as simple as it is reflected in its exchange relations alone, as envisaged by the PR School. The scientific view of 'property' should encompass its objective basis in social production which is crucial to an understanding of the content and of 'property. The right in property is an outward or external manifestation and is only a reflection of the economic content of property. It is secondary to and derivative from 'property as a social relation.' Being a nominal reflec-

tion in the human consciousness of real economic relations among people, the rights very often distort as well as reflect the economic content of property.

Property is primarily an economic phenomenon and not a sum total of objects or their material values in someone's possession. The subjective motivations of human activity (economic) alone are not sufficient to understand economic relations, because production, distribution, exchange and consumption are inter-connected phases of one and the same reproduction process. The relations among people in the above mentioned phases of material values depend on their relations in production. The PR School fails to examine the underlying objective causes of these economic activities in the mode and form of appropriation of material values viz., 'property'. Further, as an extension of this failure, the 'social types of Property' is also ill-conceived as non-existent or inefficient. Thus the paper has examined all these' cases of Property' and has recognized that the form and content of 'property, are epoch-specific and not eternal.

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I, Dr. S. Neelakantan hereby declare that particulars given above are true to the best of my knowledge and belief.

Sd/- S. NEELAKANTAN
Signature of Publisher

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